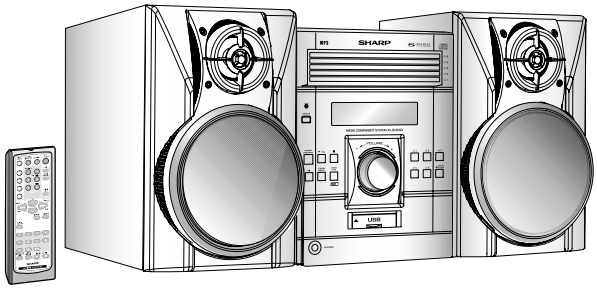
SHARP SERVICE MANUAL

No. S1601XLUH240/



MICRO COMPONENT SYSTEM

MODEL XL-UH240

XL-UH240 Micro Component System consisting of XL-UH240 main unit) and CP-UH240 (speaker system).

- In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

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Parts Guide

Parts marked with " ⚠ " are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

PRECAUTIONS FOR USING LEAD-FREE SOLDER

1. Employing lead-free solder

"MAIN,DISPLAY,SPEAKER,POWER,JACK,CD MP3,CD MOTOR(PWB ONLY),USB,SUB,REFRESH CD CHANGER MOTOR (PWB ONLY),LED PWB" of this model employs lead-free solder.

The LF symbol indicates lead-free solder, and is attached on the PWB and service manuals. The alphabetical character following LF shows the type of lead-free solder.

Example:

Sn-Ag-Cu Indicates lead-free solder of tin, silver and copper.

2. Using lead-free wire solder

When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.

As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40 °C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3. Soldering

As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40 °C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, Since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.

Lead-free solder contains more tin, and the end of the soldering bit may be easily corrected. Make sure to turn on and off the power of the bit as required.

If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.

When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Ref No.	Parts No.	Description
PWB-A	92LPWB6475MANS	MAIN (A1), POWER (A2), SPEAKER (A3), REFRESH (A4)
PWB-B	92LPWB6475DPLS	DISPLAY (B1), USB (B2), JACK (B3), LED (B4), SUB (B5)
PWB-C	92LPWB6475CDUS	CD MP3
PWB-D	92LPWB6274LEDS	LED
PWB-E	QPWBF0027AWZZ	CD MOTOR (PWB ONLY)
PWB-F	QPWBF1055AWZZ	CD CHANGER MOTOR (PWB ONLY)

CHAPTER 1. GENERAL DESCRIPTION

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

[1] IMPORTANT SERVICE NOTES (FOR U.S.A. ONLY)

BEFORE RETURNING THE AUDIO PRODUCT

(Fire & Shock Hazard)

Before returning the audio product to the user, perform the following safety checks.

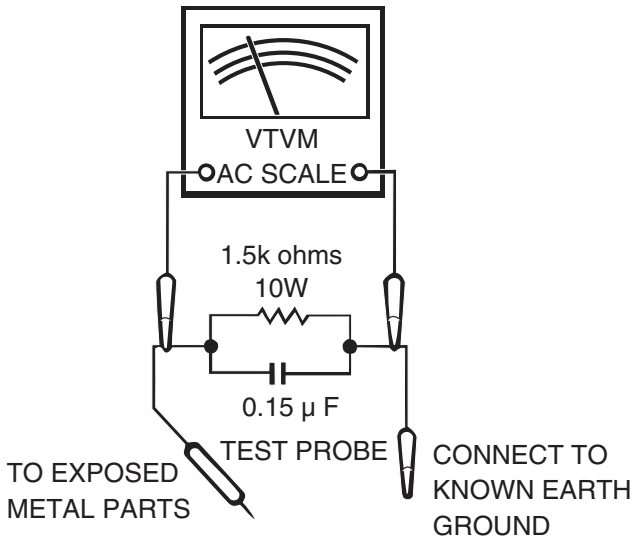
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the audio product.
2. Inspect all protective devices such as insulating materials, cabinet, terminal board, adjustment and compartment covers or shields, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

* Plug the AC line cord directly into a 120 volt AC outlet.

* Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as conduit or electrical ground connected to earth ground.

* Use a VTVM or VOM with 1000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor (See diagram).

* Connect the resistor connection to all exposed metal parts having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.



All check must be repeated with the AC line cord plug connection reversed.

Any reading of 0.3 volt RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the audio product to the owner.

[2] SPECIFICATIONS

■ General

Power source	AC 120 V, 60 Hz
Power consumption	90 W
Dimensions	Width: 6-3/4" (175 mm) Height: 9-1/2" (240 mm) Depth: 12-1/5" (315 mm)
Weight	12.4 lbs. (5.6 kg)

■ Amplifier

Output power	90 watts minimum RMS per channel into 6 ohms from 100 Hz to 20 kHz, 10% total harmonic distortion
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms) Subwoofer pre-out (audio signal): 200 mV/10 k ohms at 70 Hz
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 k ohms

■ USB

Class	Mass storage class
Support File	MP3/WMA (do not support DRM file)
Format support	FAT 16 or FAT 32
Bitrate support	MP3 (32 ~ 320 kbps) WMA (64 ~ 160 kbps)
Other	MP3 ID3 - tag only supports version 1.x USB supports version 2.0

■ CD player

Type	5-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

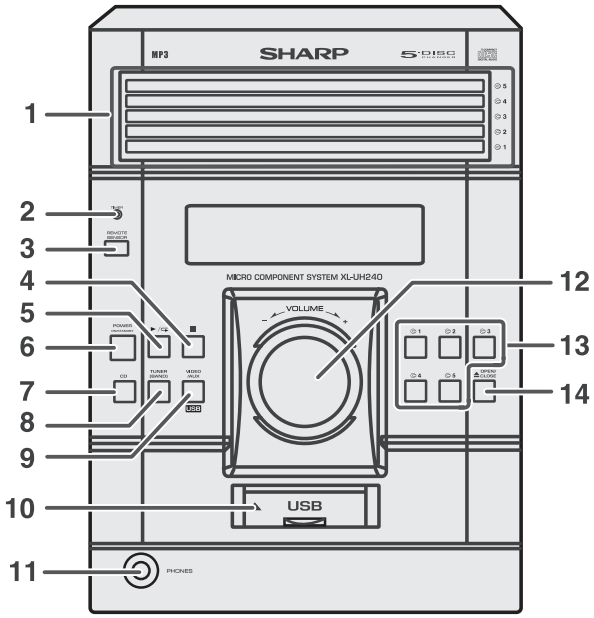
Frequency range	FM: 87.5 - 108 MHz AM: 530 - 1,720 kHz

■ Speaker

Type	2-way type light-up speaker system 2" (5 cm) tweeter 5-1/8" (13 cm) woofer
Maximum input power	180 W
Rated input power	90 W
Impedance	6 ohms
Dimensions	Width: 6-1/2" (165 mm) Height: 10-1/4" (260 mm) Depth: 9-5/8" (245 mm)
Weight	5.5 lbs. (2.5 kg/each)

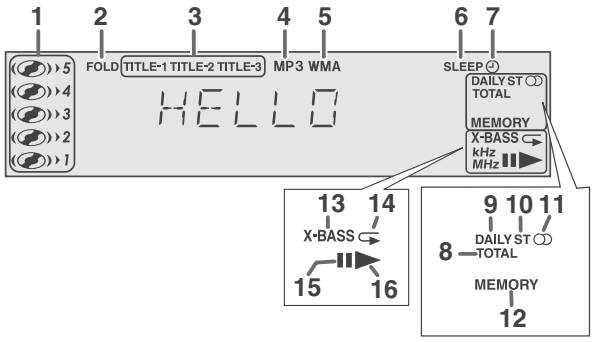
[3] NAMES OF PARTS

Controls and indicators



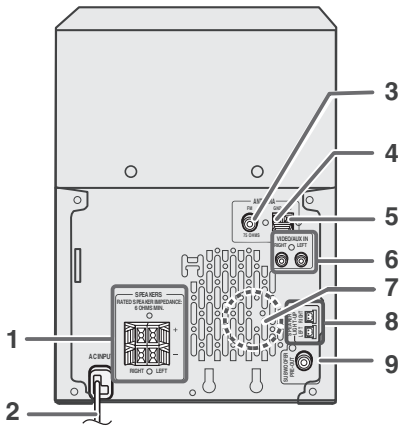
■ Front panel

1. Disc Trays
2. Timer Indicator
3. Remote Sensor
4. Disc or USB Stop Button
5. Disc or USB Play or Repeat Button
6. Power ON/STANDBY Button
7. CD Button
8. Tuner (Band) Button
9. Video/Auxiliary/USB Button
10. USB Terminal
11. Headphone Jack
12. Volume Control
13. Disc Number Select Buttons
14. Disc Tray Open/Close Button



■ Display

1. Disc Number Indicators
2. MP3/WMA Folder Indicator
3. MP3/WMA Title Indicators
4. MP3 Indicator
5. WMA Indicator
6. Sleep Indicator
7. Timer Play Indicator
8. MP3/WMA Total Indicator
9. Daily Timer Indicator
10. FM Stereo Mode Indicator
11. FM Stereo Receiving Indicator
12. Memory Indicator
13. Extra Bass Indicator
14. Disc or USB Repeat Play Indicator
15. Disc or USB Pause Indicator
16. Disc or USB Play Indicator

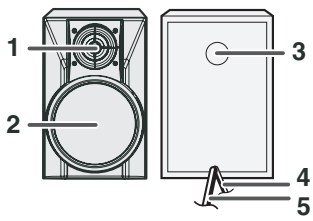


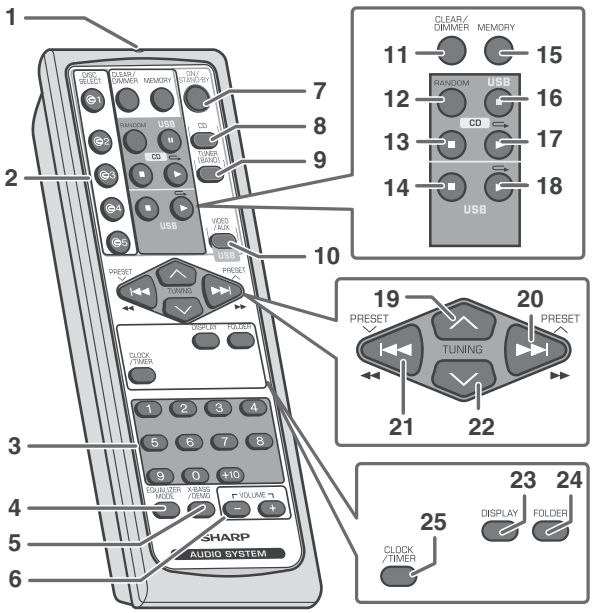
■ Rear panel

1. Speaker Terminals
2. AC Power Cord
3. FM 75 Ohms Antenna Jack
4. AM Antenna Ground Terminal
5. AM Loop Antenna Terminal
6. Video/Auxiliary (Audio Signal) Input Jacks
7. Cooling Fan
8. Speaker Light-up Jacks
9. Subwoofer Pre-output Jack

■ Speaker system

1. Tweeter
2. Woofer
3. Bass Reflex Duct
4. Speaker Wire
5. Speaker Light-up Wire





■ Remote control

1. Remote Control Transmitter
2. Disc Number Select Buttons
3. Disc Direct Search Buttons
4. Equalizer Mode Select Button
5. Extra Bass/Demo Button
6. Volume Up and Down Buttons
7. Power On/Stand-by Button
8. CD Button
9. Tuner (Band) Button
10. Video/Auxiliary/USB Button
11. Disc Clear/Dimmer Button
12. Disc Random Button
13. Disc Stop Button
14. USB Stop Button
15. Memory Button
16. Disc/USB Pause Button
17. Disc Play or Repeat Button
18. USB Play or Repeat Button
19. Tuning Up Button
20. CD Track Up or Fast Forward, Tuner Preset Up, Time Up Button
21. CD Track Down or Fast Reverse, Tuner Preset Down, Time Down Button
22. Tuning Down Button
23. Display Button
24. Folder Button
25. Clock/Timer Button

CHAPTER 2. ADJUSTMENTS

[1] CD SECTION

1. CD SECTION

- **Adjustment**

  Since this CD system incorporates the following automatic adjustment functions, readjustment is not needed when replacing the pickup. Therefore, different PWBs and pickups can be combined freely.

  Each time a disc is changed, these adjustments are performed automatically. Therefore, playback of each disc can be performed under optimum conditions.

Items adjusted automatically

1) Offset adjustment (The offset voltage between the head amplifier output and the VREF reference voltage is compensated inside the IC.)
   * Focus offset adjustment
   * Tracking offset adjustment
2) Tracking balance adjustment
3) Gain adjustment (The gain is compensated inside the IC so that the loop gain at the gain crossover frequency will be 0 dB.)
   * Focus gain adjustment
   * Tracking gain adjustment

2. CD ERROR CODE DESCRIPTION

Error	Explanation
10*	CAM error. Can't detect CAM switch when CAM is moving.
11*	When it detect cam operation error during initialize process.
20*	TRAY error. Can't detect TRAY switch when TRAY is moving.
21*	When it detect TRAY operation error during initialize process.

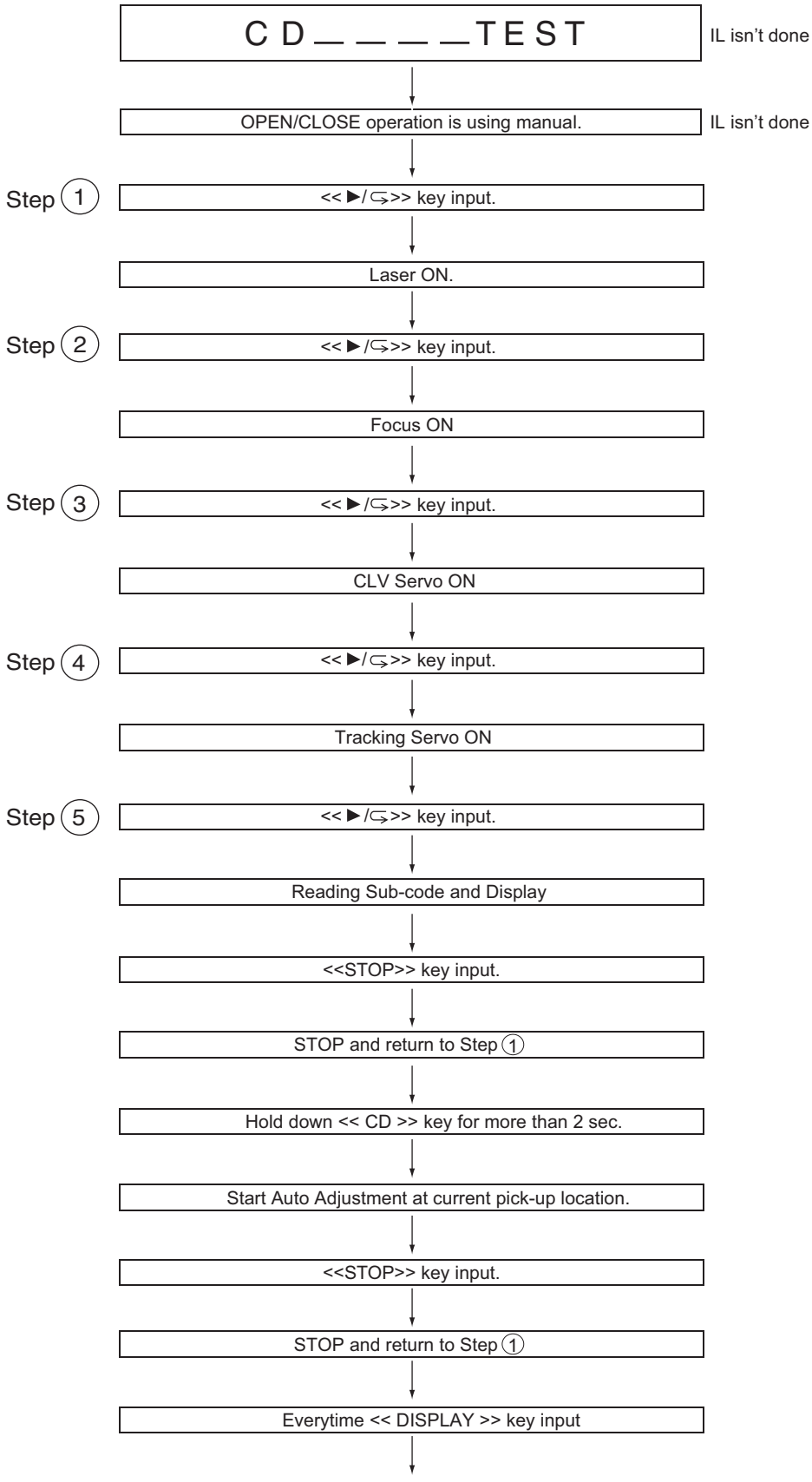
* 'CHECKING'

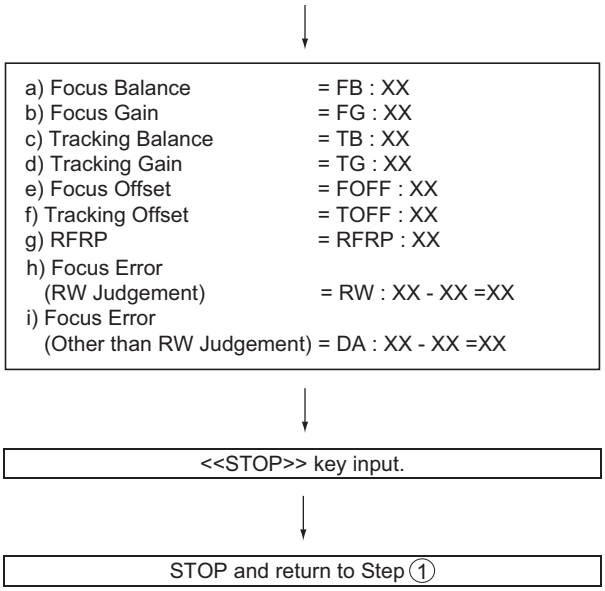
If Error is detected, 'CHECKING' will be displayed instead of 'ER-CD**'. 'ER-CD**' display will only be displayed when error had been detected for the 5^{th} times.

[2] TEST MODE

• Setting the test mode

During stand-by mode, press STOP button while pressing down the ⊕3 button and ⊕4 button. Then, press the CD button to enter the test mode.




a) Focus Balance = FB : XX
b) Focus Gain = FG : XX
c) Tracking Balance = TB : XX
d) Tracking Gain = TG : XX
e) Focus Offset = FOFF : XX
f) Tracking Offset = TOFF : XX
g) RFRP = RFRP : XX
h) Focus Error
(RW Judgement) = RW : XX - XX =XX
i) Focus Error
(Other than RW Judgement) = DA : XX - XX =XX
<<STOP>> key input.
STOP and return to Step ①

Note • Sliding the PICKUP with<< ▷▷ >>, << ◁◁ >> button can be set in STOP mode or play mode.

• During at Step ①, if press <<▶/⮑>> for more than 1 sec, it directly goes to step ⑤.

To cancel: Power OFF

[3] Standard Specification of Stereo System Error Message Display Contents

Error Contents		DISPLAY	Notes
CD	CD Changer Mechanism Error.	'ER-CD**' (*)	10: CAM SW Detection NG during normal operation
			11: CAM SW Detection NG during initialize process
			20: TRAY SW Detection NG during normal operation
			21: TRAY SW Detection NG during initialize process
	Focus Not Match/IL Time Over.	'NO DISC'	
TUNER	PLL Unlock.	FM 87.50 MHz	PLL Unlock.

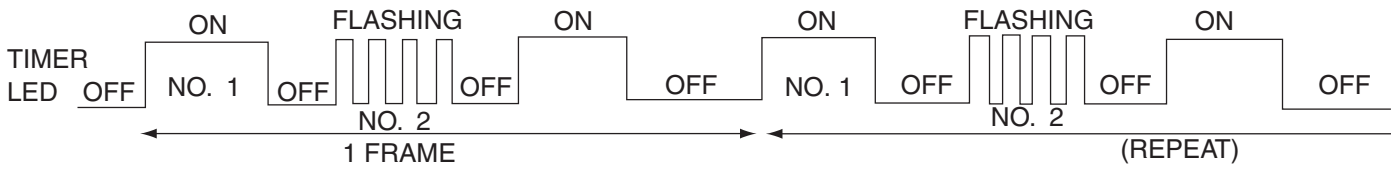
(*) CHECKING:

If CD changer mechanism error is detected, 'CHECKING' will be display instead of 'ER-CD**'. 'ER-CD**' display will only be display when error had been detected for the 5th times.

Speaker abnormal detection and +B PROTECTION display

In case speaker abnormal detection or +B PROTECTION had occurred, the unit will automatically enter to stand-by mode and Timer indicator will flashing as below.

Example:In case of speaker abnormal



NO. 1 : +B PROTECTION
NO. 2 : Speaker abnormal

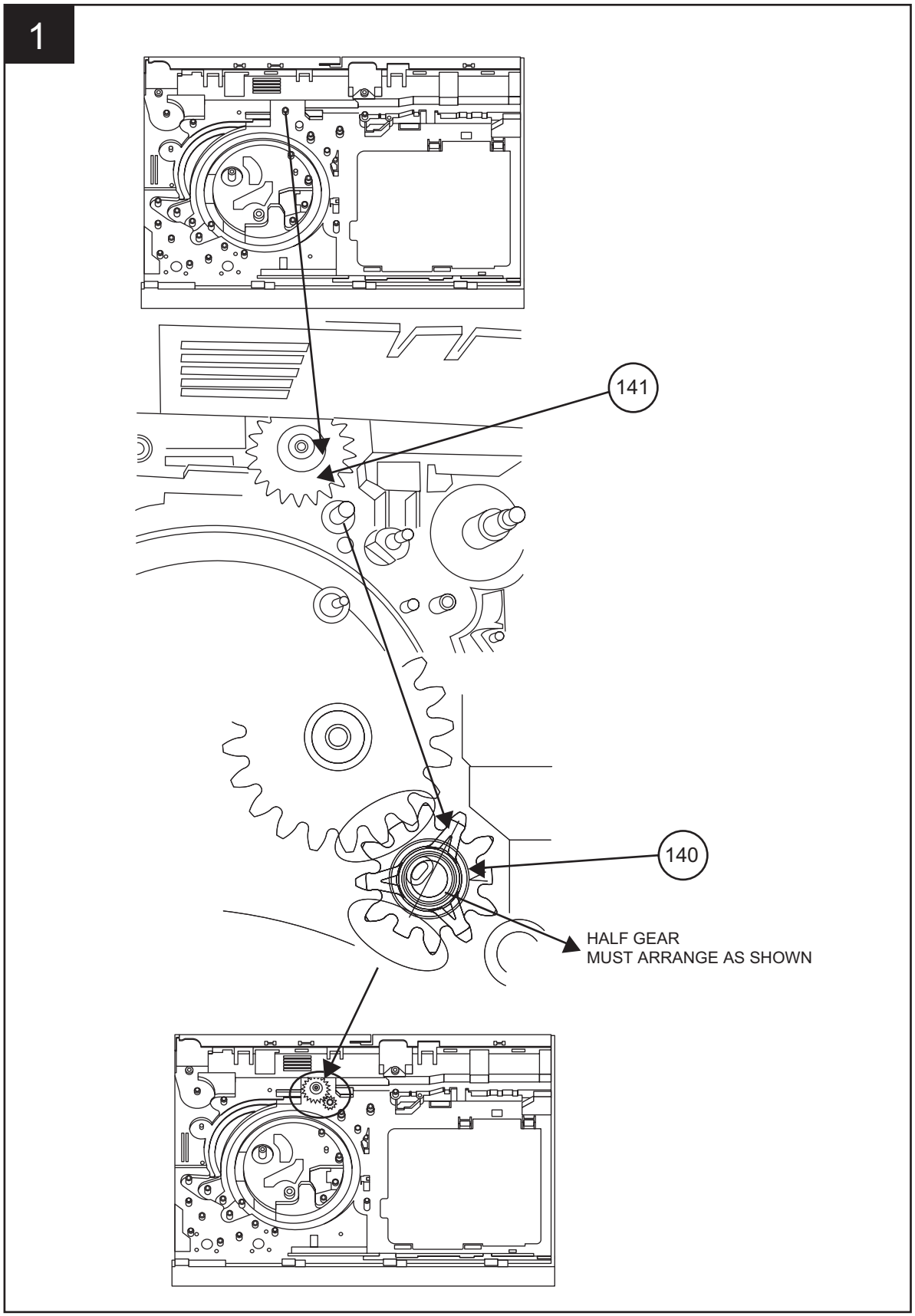
BEFORE TRANSPORTING THE UNIT

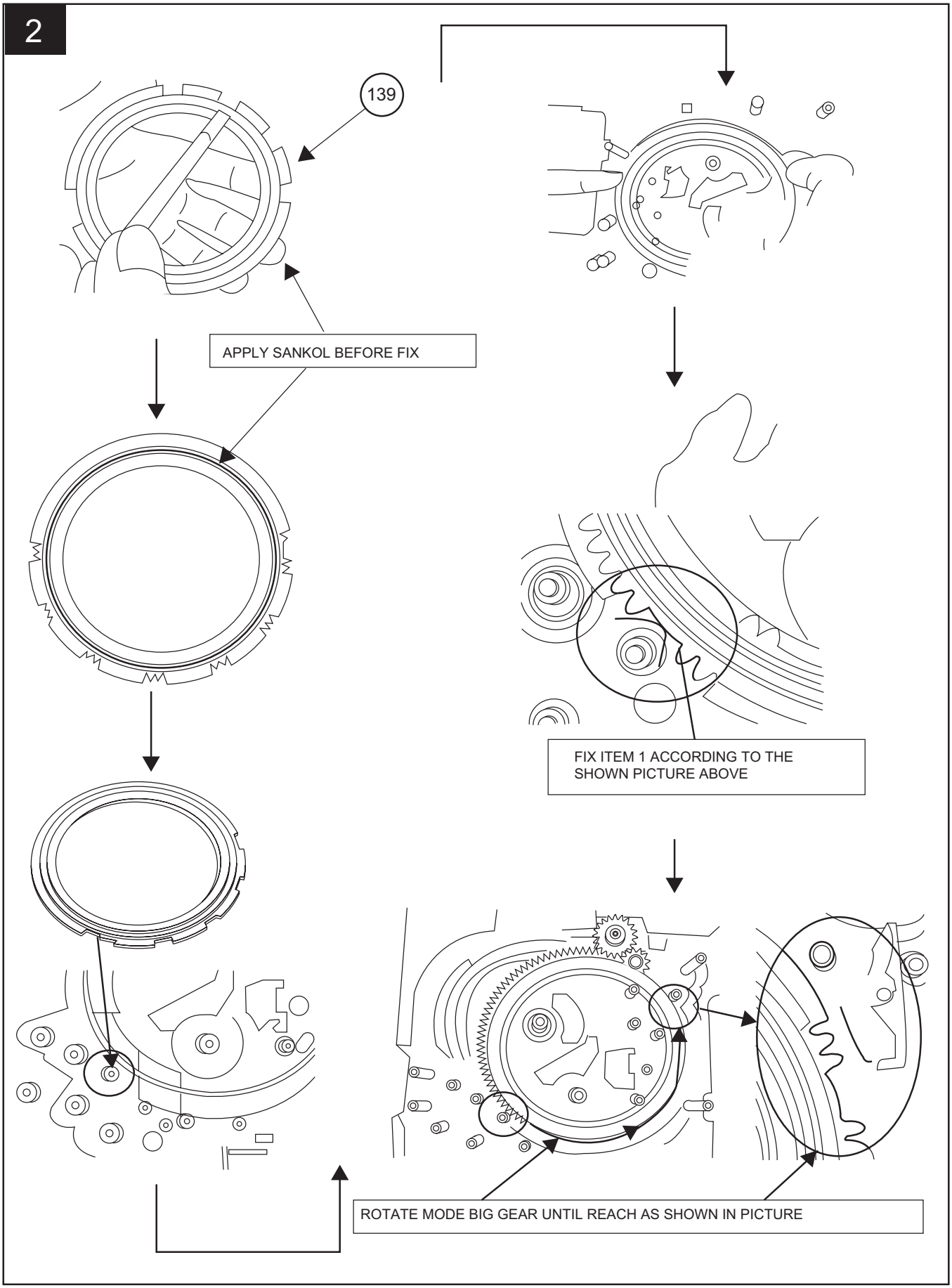
The following process need to be taken after set tapering/parts replacement.

1. Press the POWER ON/STAND-BY button to enter stand-by mode.
2. While pressing down the ⧁3 button and the ⧁4 button, press the ■ button. The Micro Computer version number will be displayed as "XL-U-****" and " FW****_V**".
3. Turn the VOLUME KNOB until FL will display “INIT_ _MENU.”
4. Press the ■ button until "WAIT"--> "FINISHED" appears.
5. Unplug the AC cord and the unit is ready for transporting.

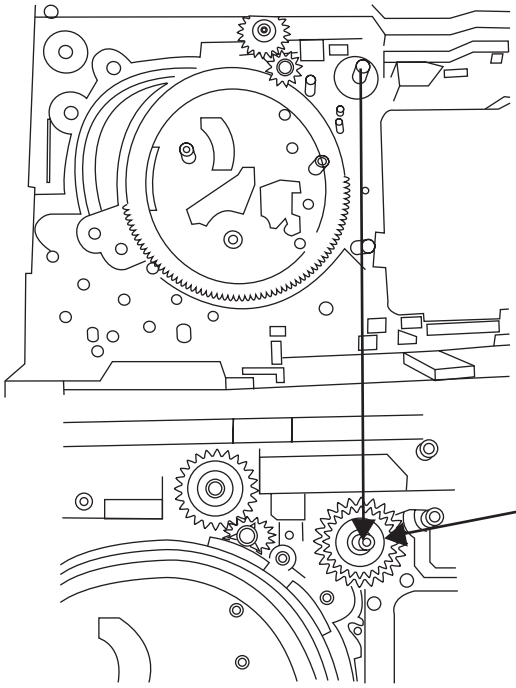
[4] CD Changer mechanism section

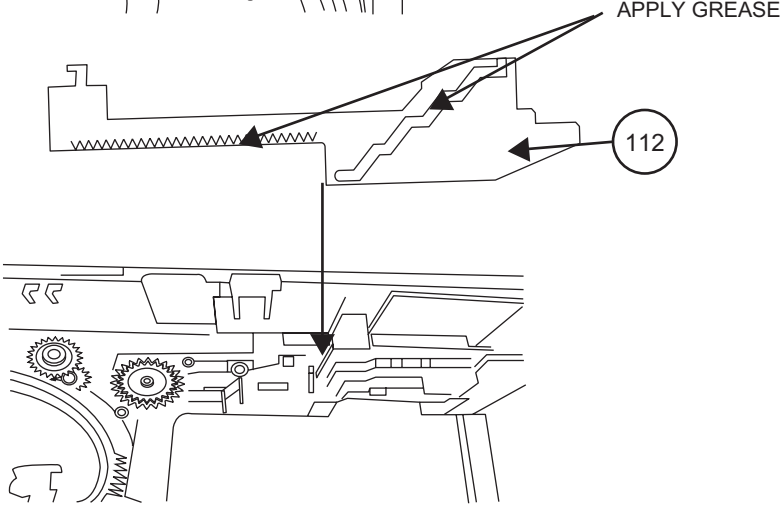
- A number in the drawing sheet is the number of the parts guide (CHANGER MECHANISM PARTS).

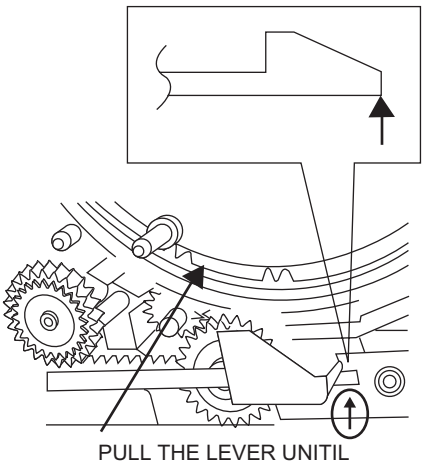


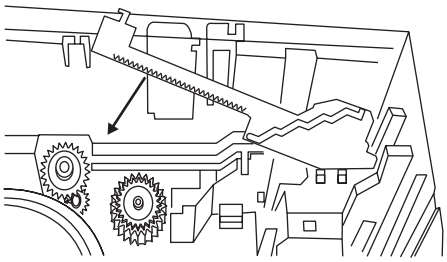

2
139
APPLY SANKOL BEFORE FIX
FIX ITEM 1 ACCORDING TO THE SHOWN PICTURE ABOVE
ROTATE MODE BIG GEAR UNTIL REACH AS SHOWN IN PICTURE

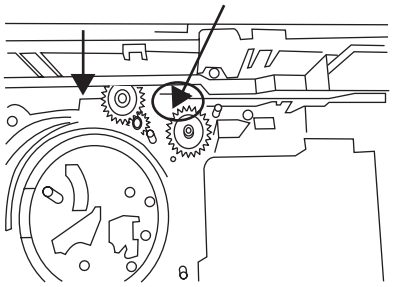
3


143

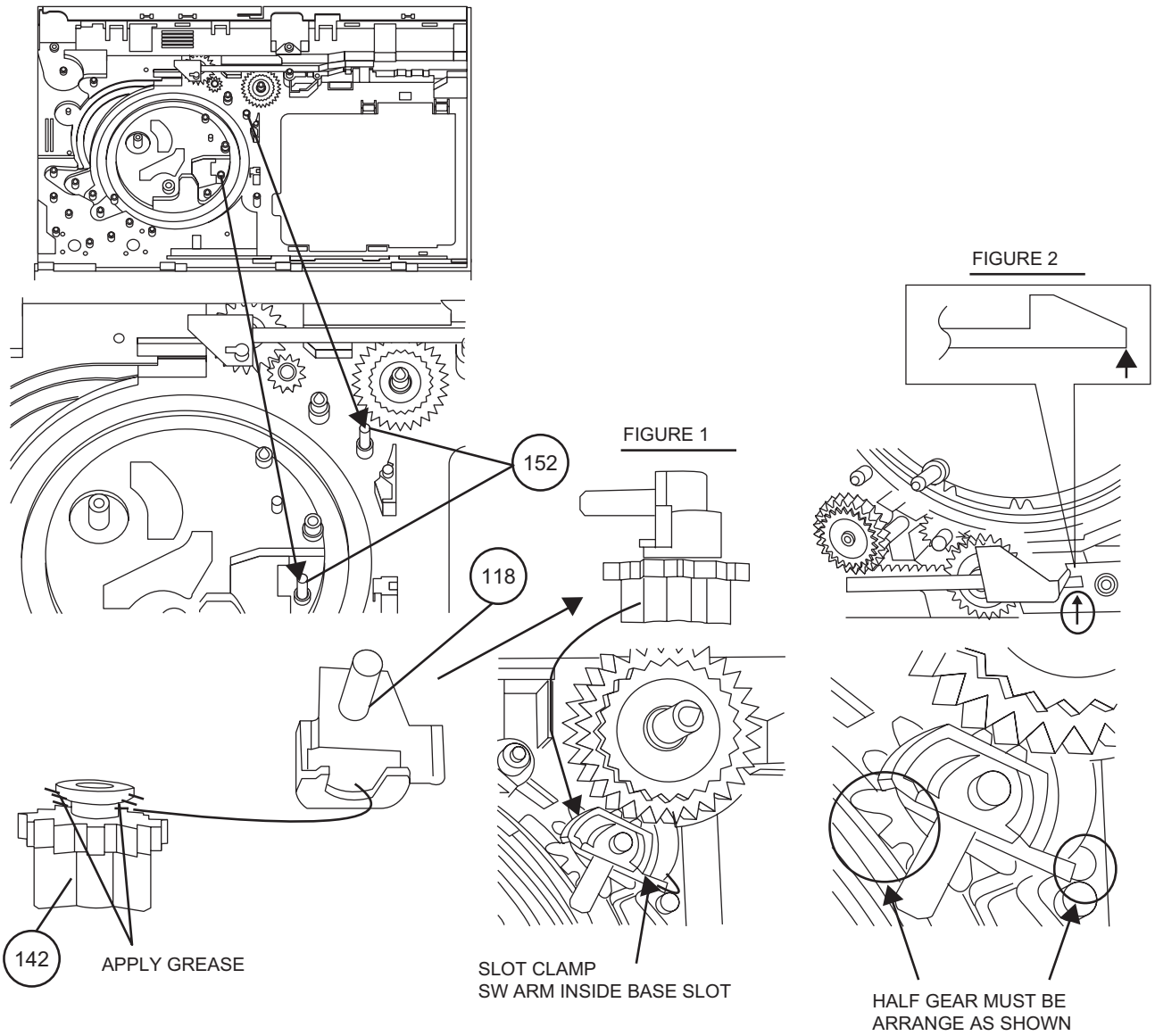

APPLY GREASE
112


PULL THE LEVER UNITIL
REACH THE ARROW MARK

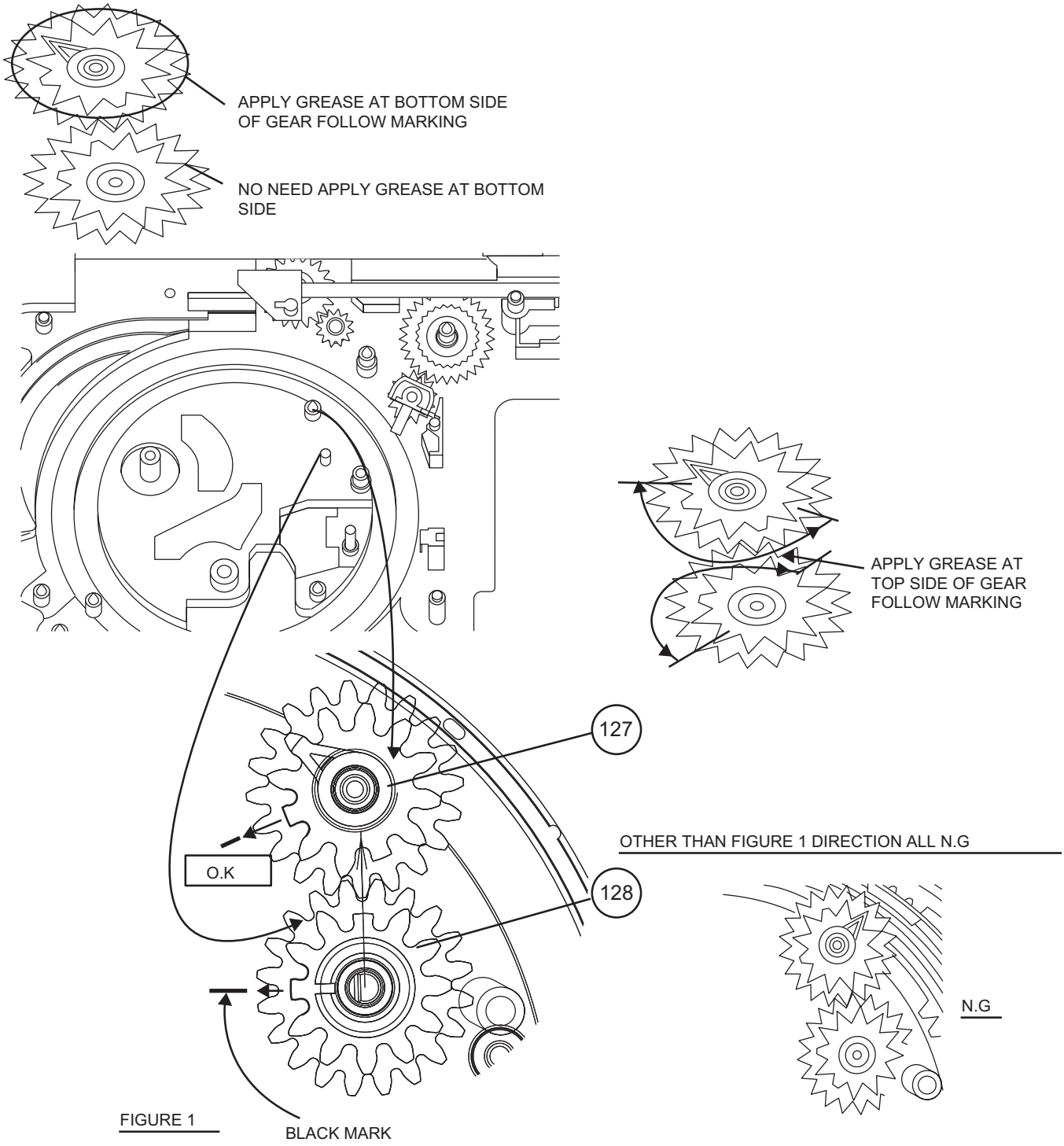




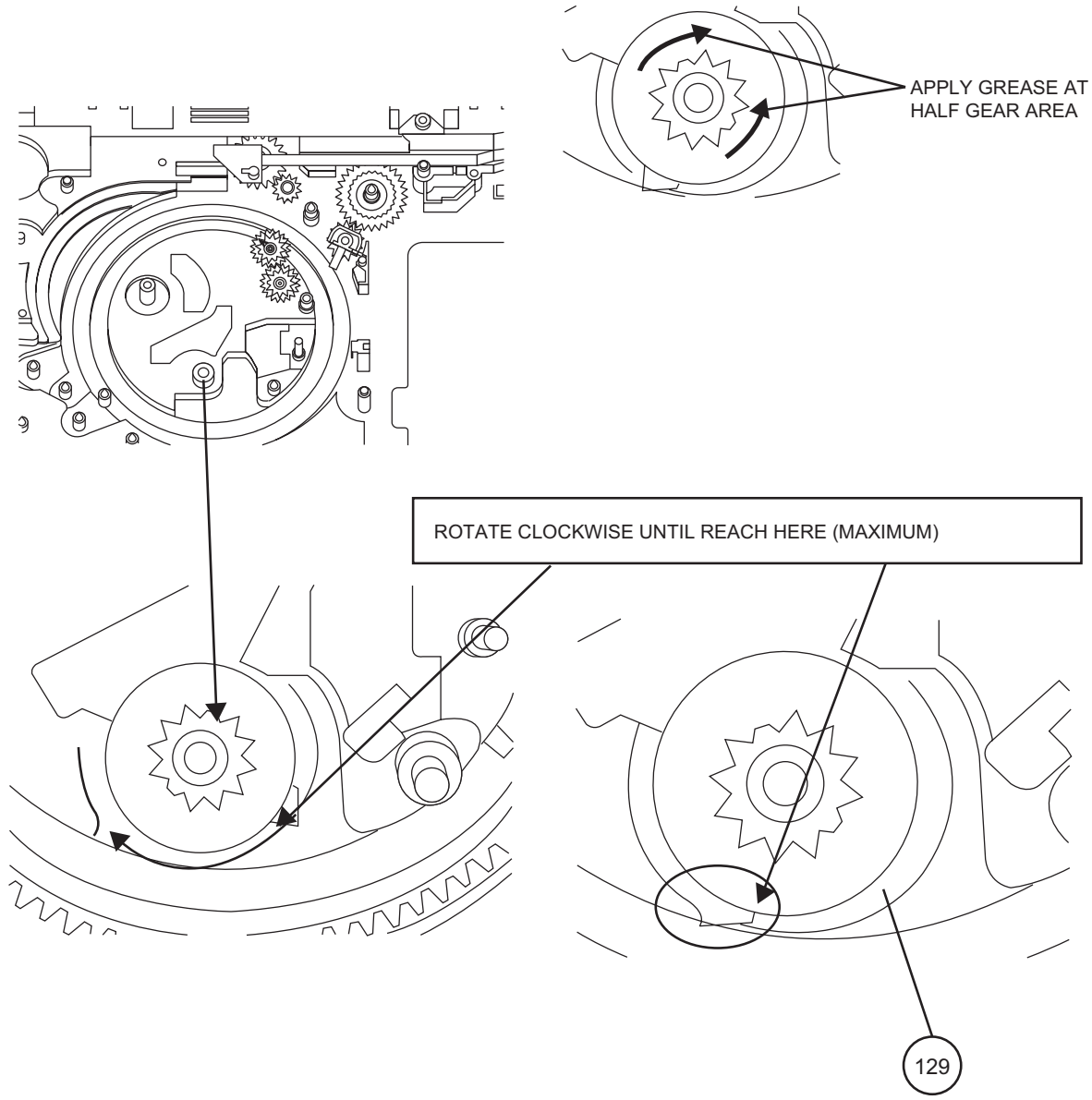
4


152
118
142
APPLY GREASE
FIGURE 1
SLOT CLAMP
SW ARM INSIDE BASE SLOT
FIGURE 2
HALF GEAR MUST BE
ARRANGE AS SHOWN

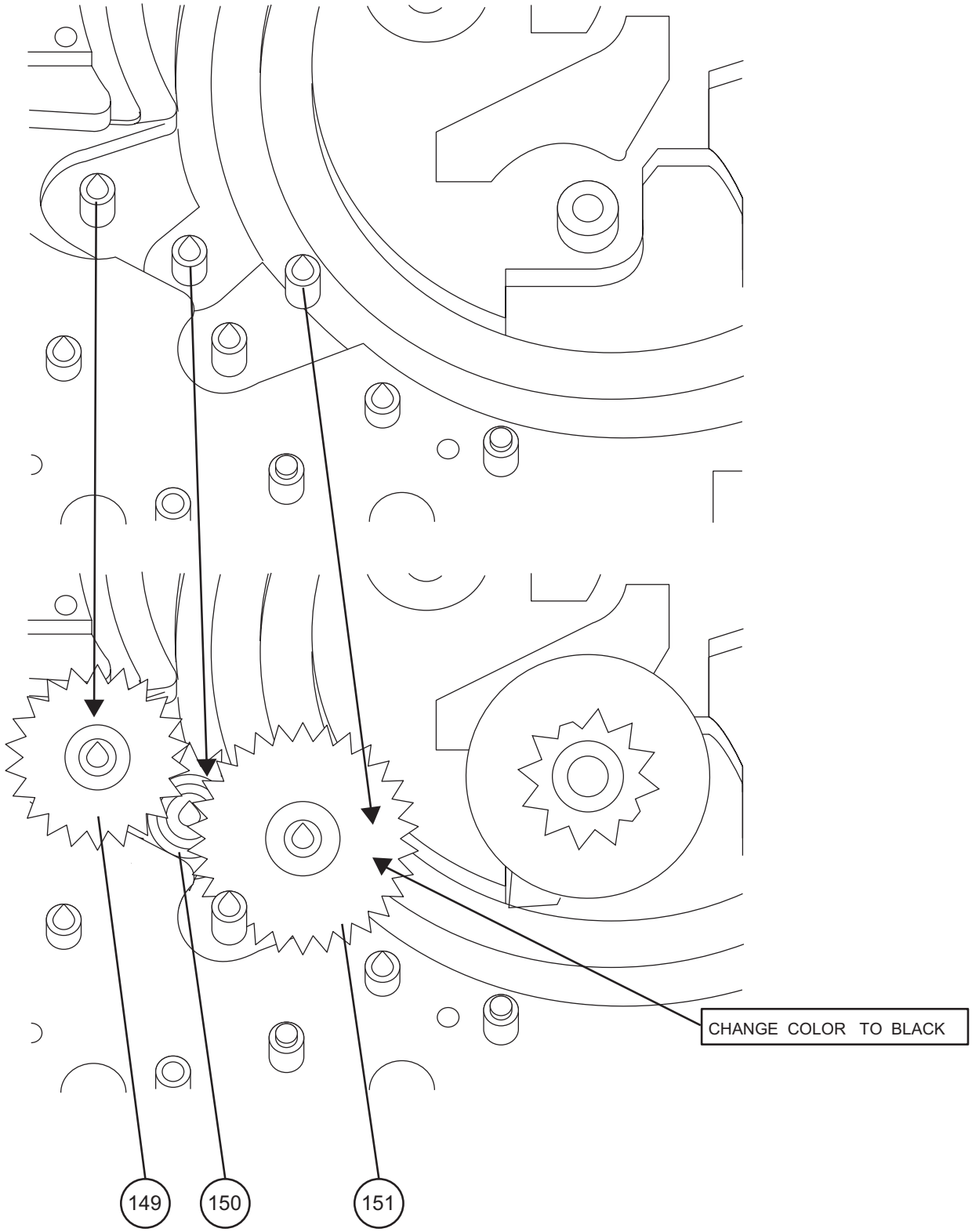
5


APPLY GREASE AT BOTTOM SIDE
OF GEAR FOLLOW MARKING
NO NEED APPLY GREASE AT BOTTOM
SIDE
APPLY GREASE AT
TOP SIDE OF GEAR
FOLLOW MARKING
127
128
O.K
BLACK MARK
FIGURE 1
OTHER THAN FIGURE 1 DIRECTION ALL N.G
N.G

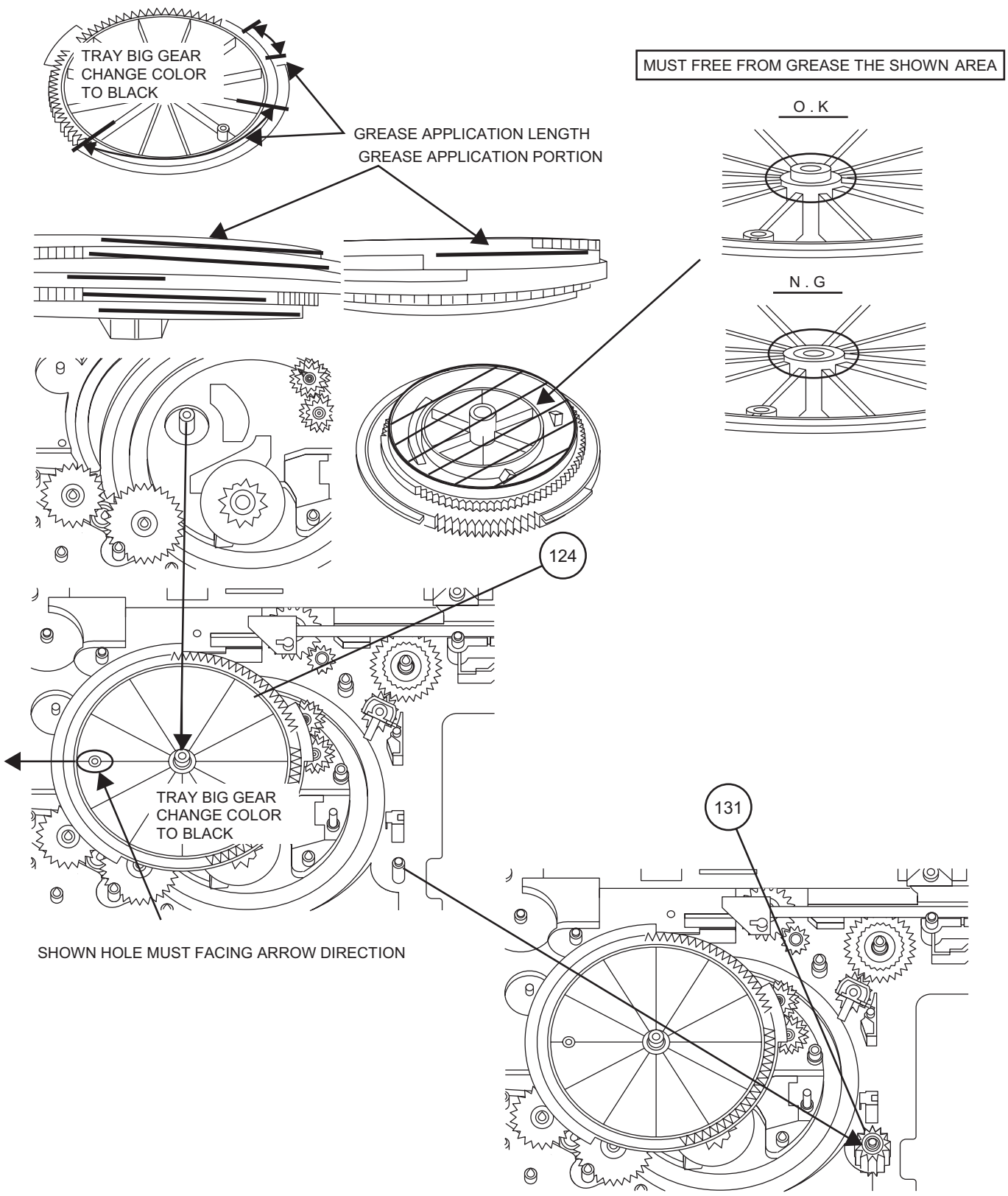
6


APPLY GREASE AT
HALF GEAR AREA
ROTATE CLOCKWISE UNTIL REACH HERE (MAXIMUM)
129

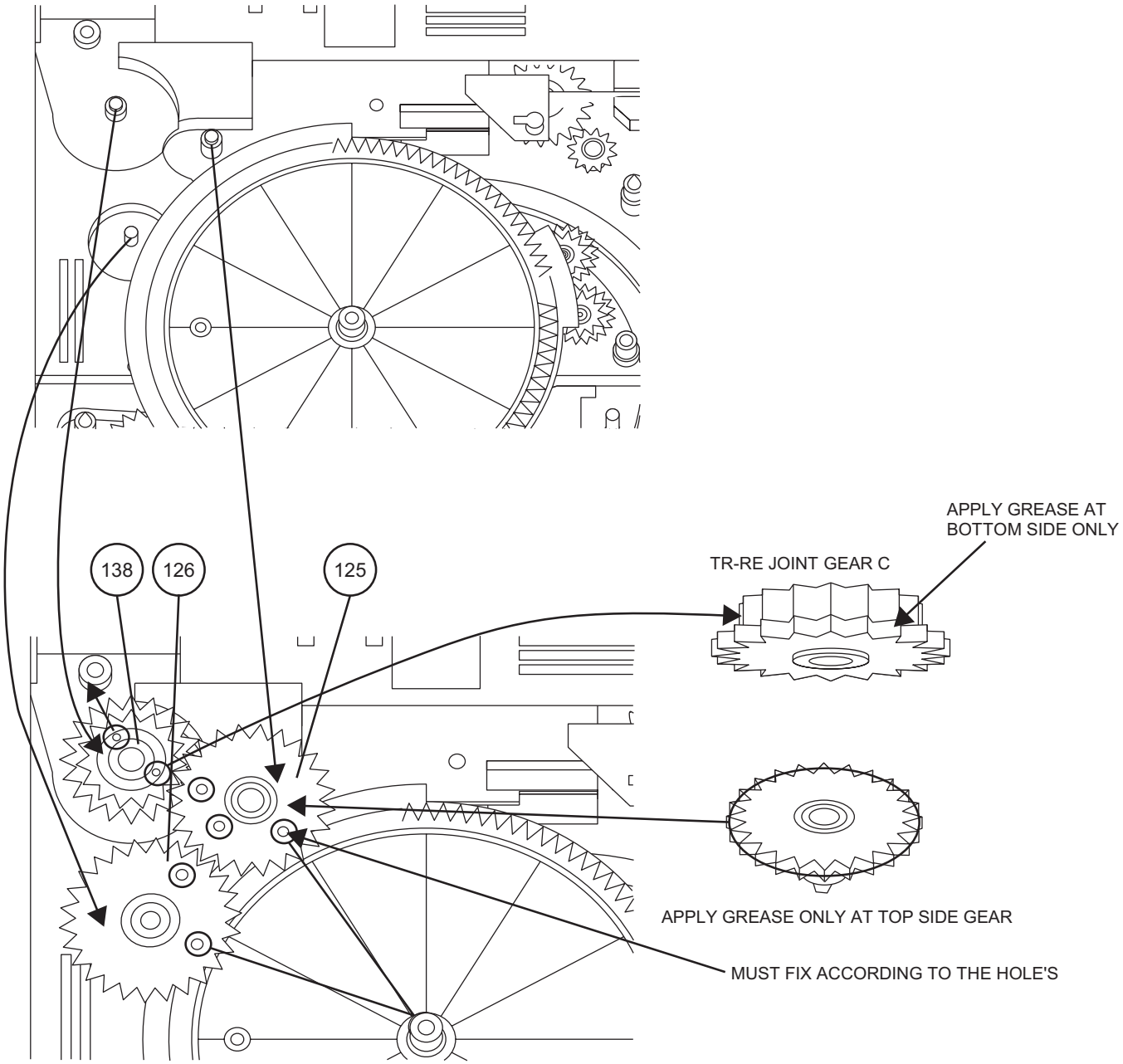
7



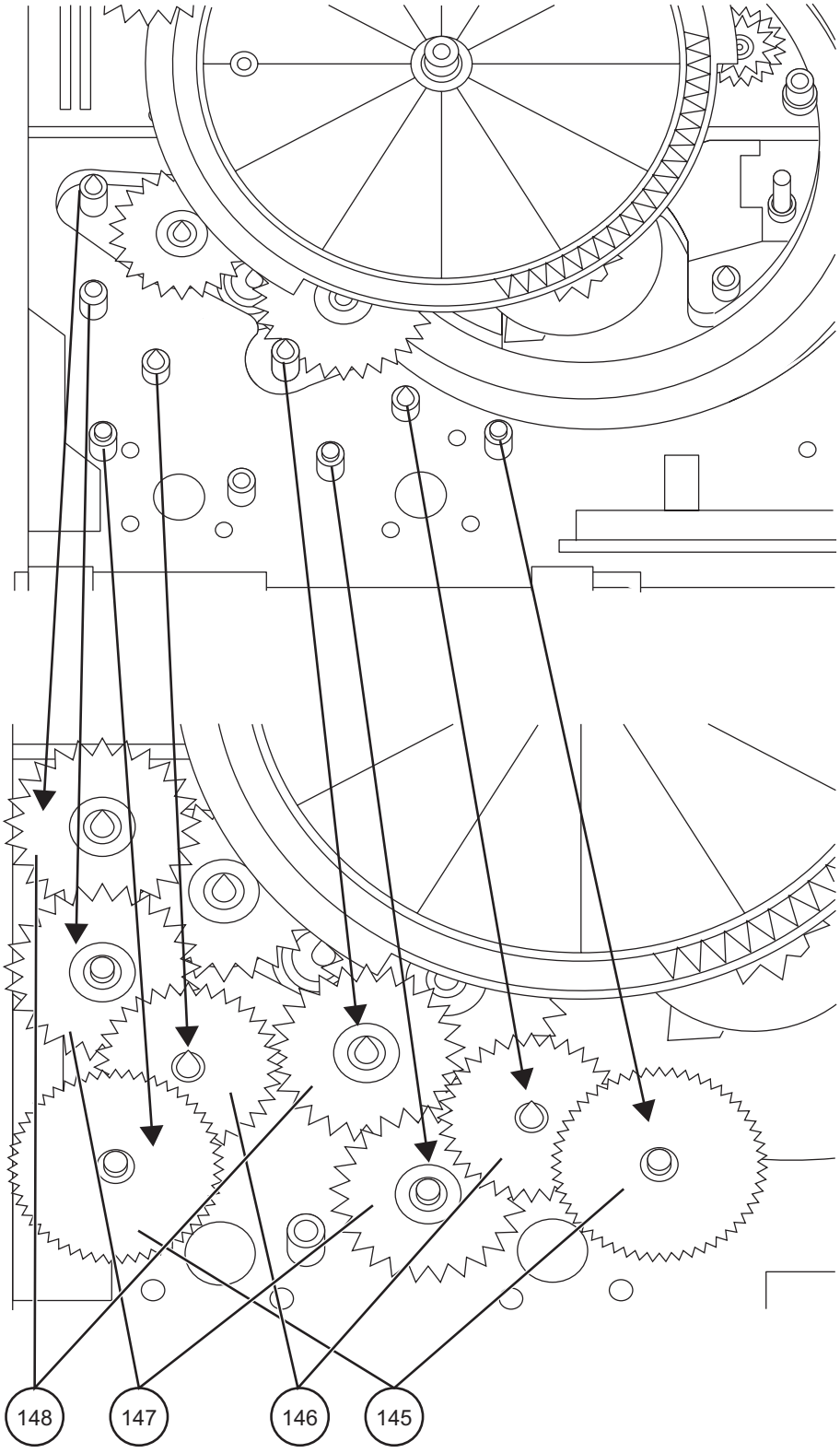
8


TRAY BIG GEAR
CHANGE COLOR
TO BLACK
GREASE APPLICATION LENGTH
GREASE APPLICATION PORTION
MUST FREE FROM GREASE THE SHOWN AREA
O . K
N . G
124
TRAY BIG GEAR
CHANGE COLOR
TO BLACK
131
SHOWN HOLE MUST FACING ARROW DIRECTION

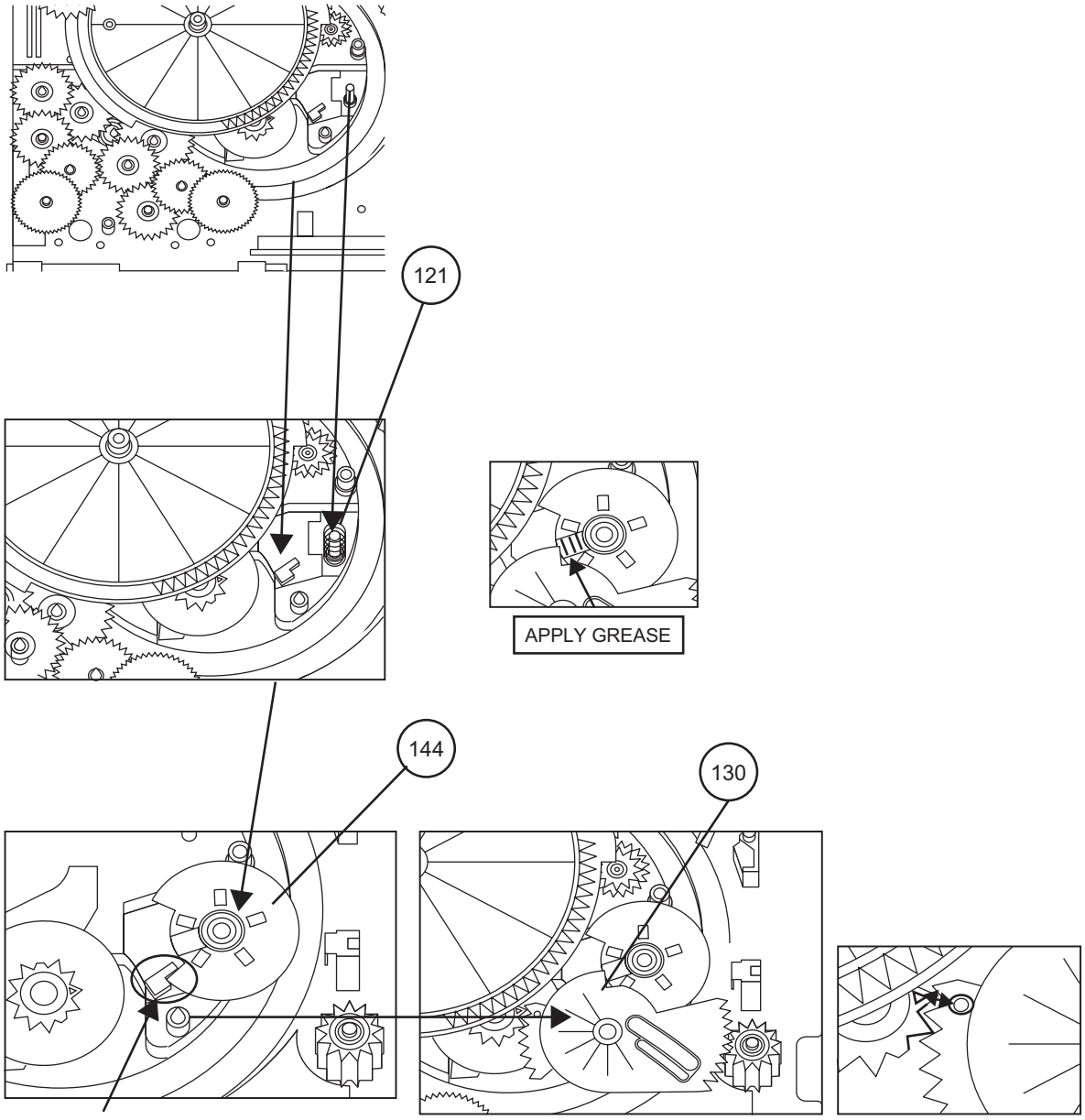
9


APPLY GREASE AT
BOTTOM SIDE ONLY
TR-RE JOINT GEAR C
138
126
125
APPLY GREASE ONLY AT TOP SIDE GEAR
MUST FIX ACCORDING TO THE HOLE'S

10

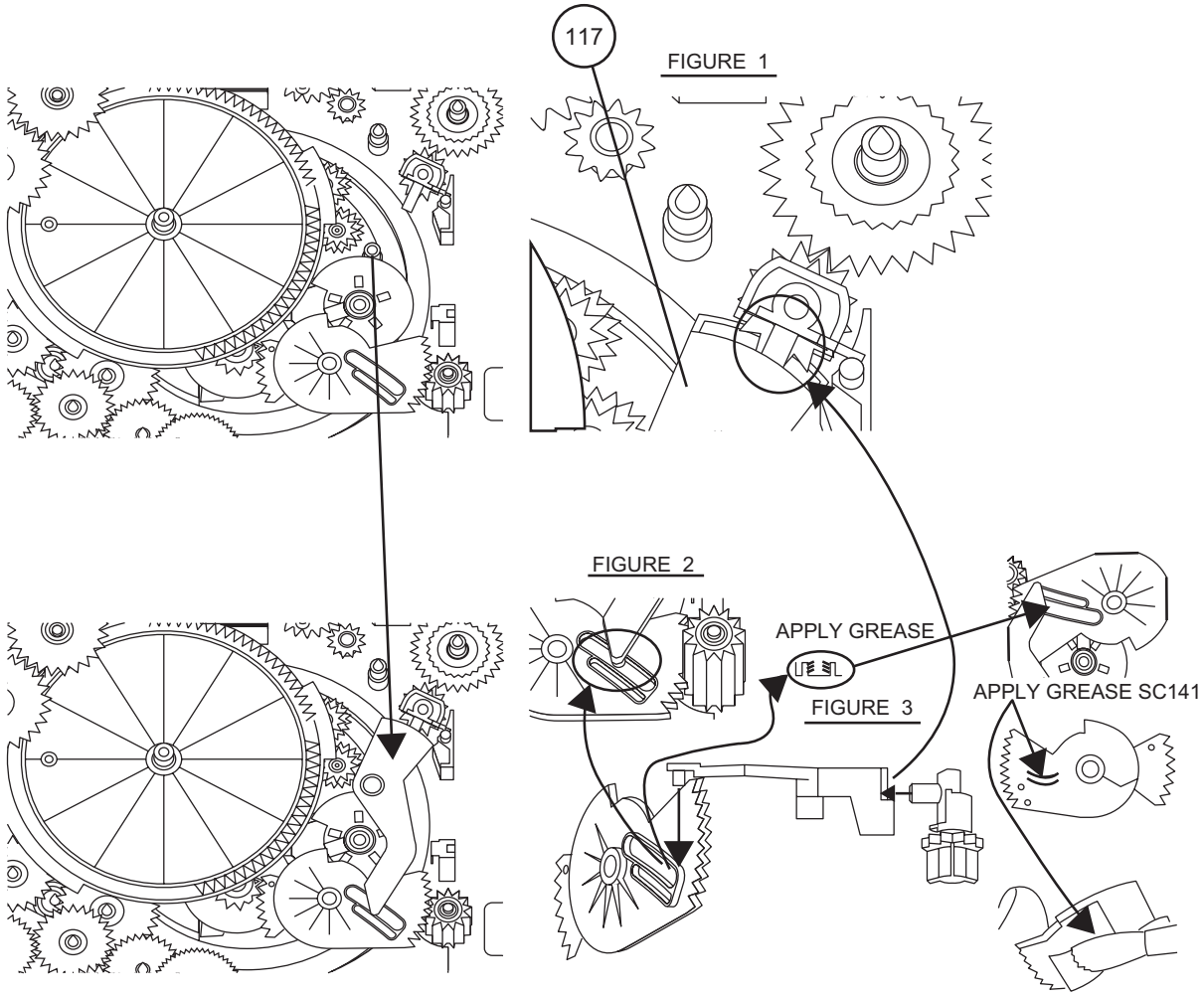


11

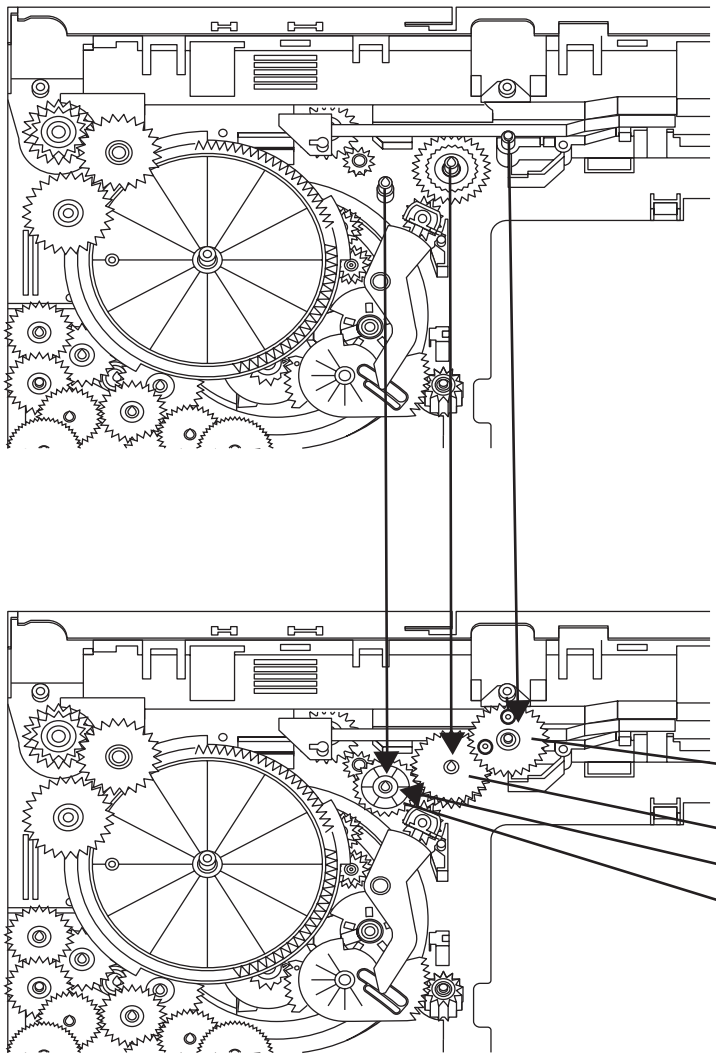


WHEN FIXING ITEM 2 MUST FOLLOW AS SHOWN

12

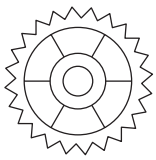

117
FIGURE 1
FIGURE 2
APPLY GREASE
FIGURE 3
APPLY GREASE SC141

13



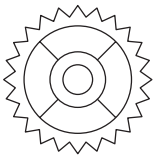
ITEM 2 , 3 MUST APPLY GREASE ON TOP SIDE GEAR ONLY

GEAR 112
O . K



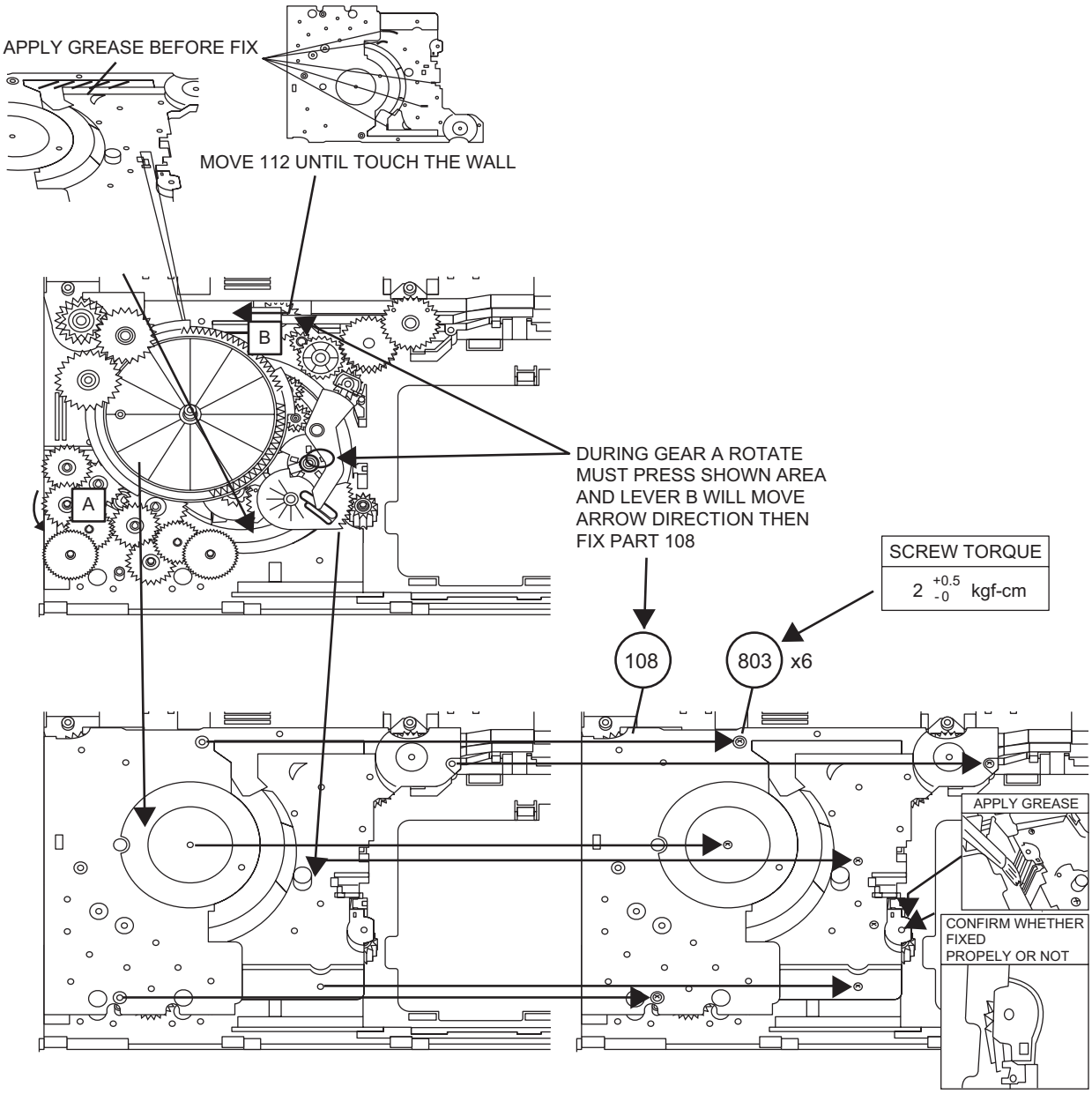
TOP VIEW AFTER ASSY

GEAR 112
N . G

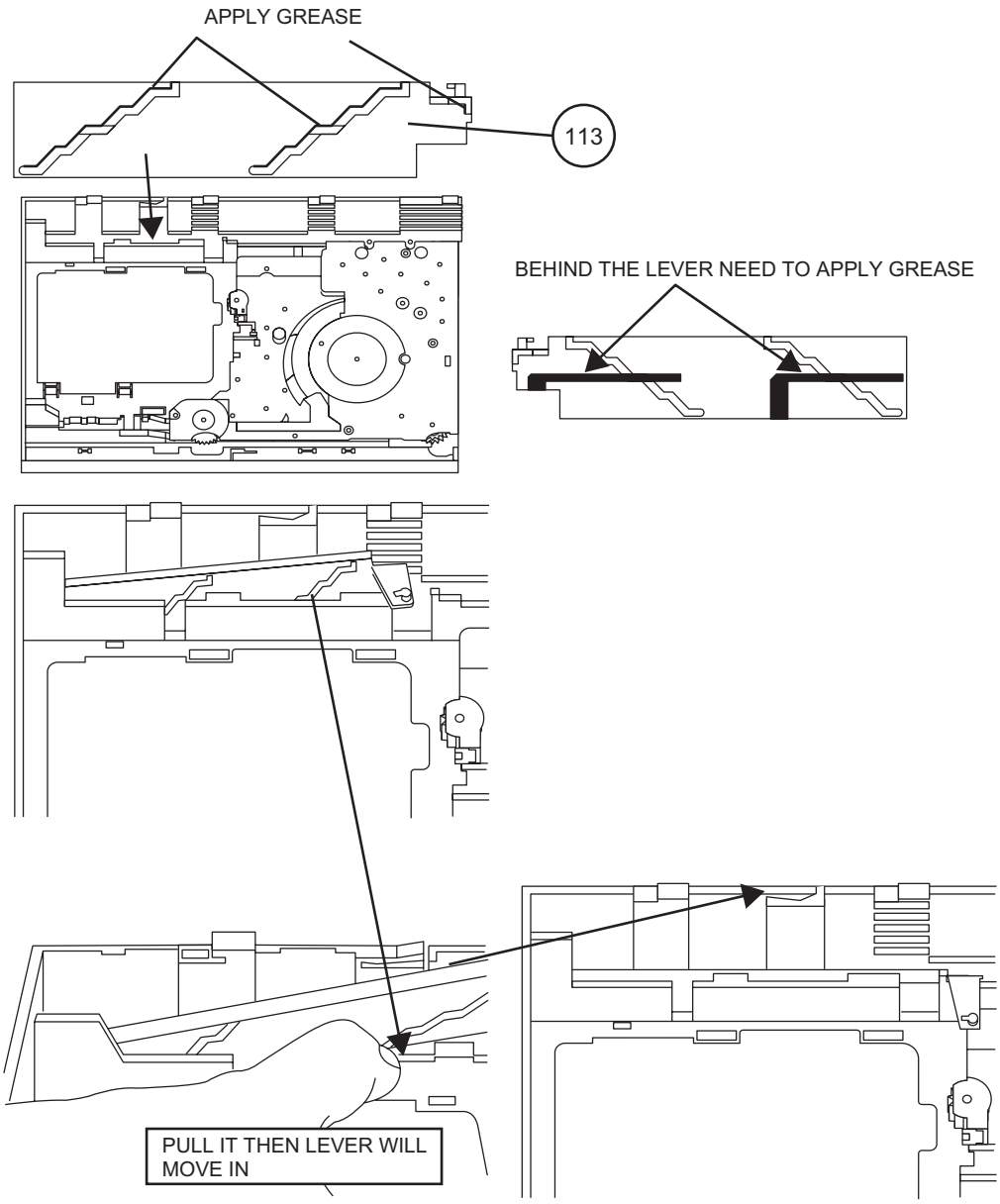


FIX REVERSE N.G

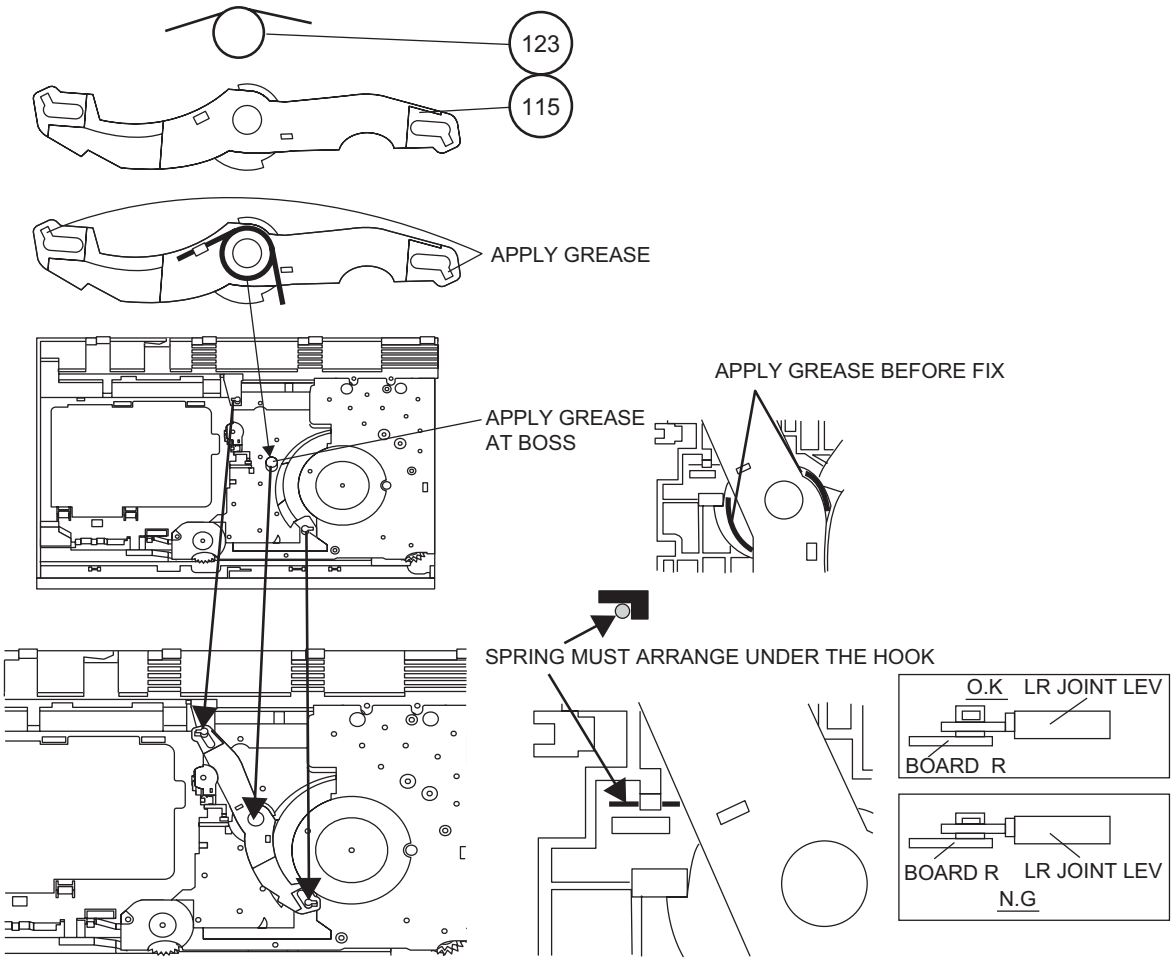
14


APPLY GREASE BEFORE FIX
MOVE 112 UNTIL TOUCH THE WALL
B
A
DURING GEAR A ROTATE
MUST PRESS SHOWN AREA
AND LEVER B WILL MOVE
ARROW DIRECTION THEN
FIX PART 108
SCREW TORQUE
2 +0.5 -0 kgf-cm
108
803
x6
APPLY GREASE
CONFIRM WHETHER
FIXED
PROPELY OR NOT

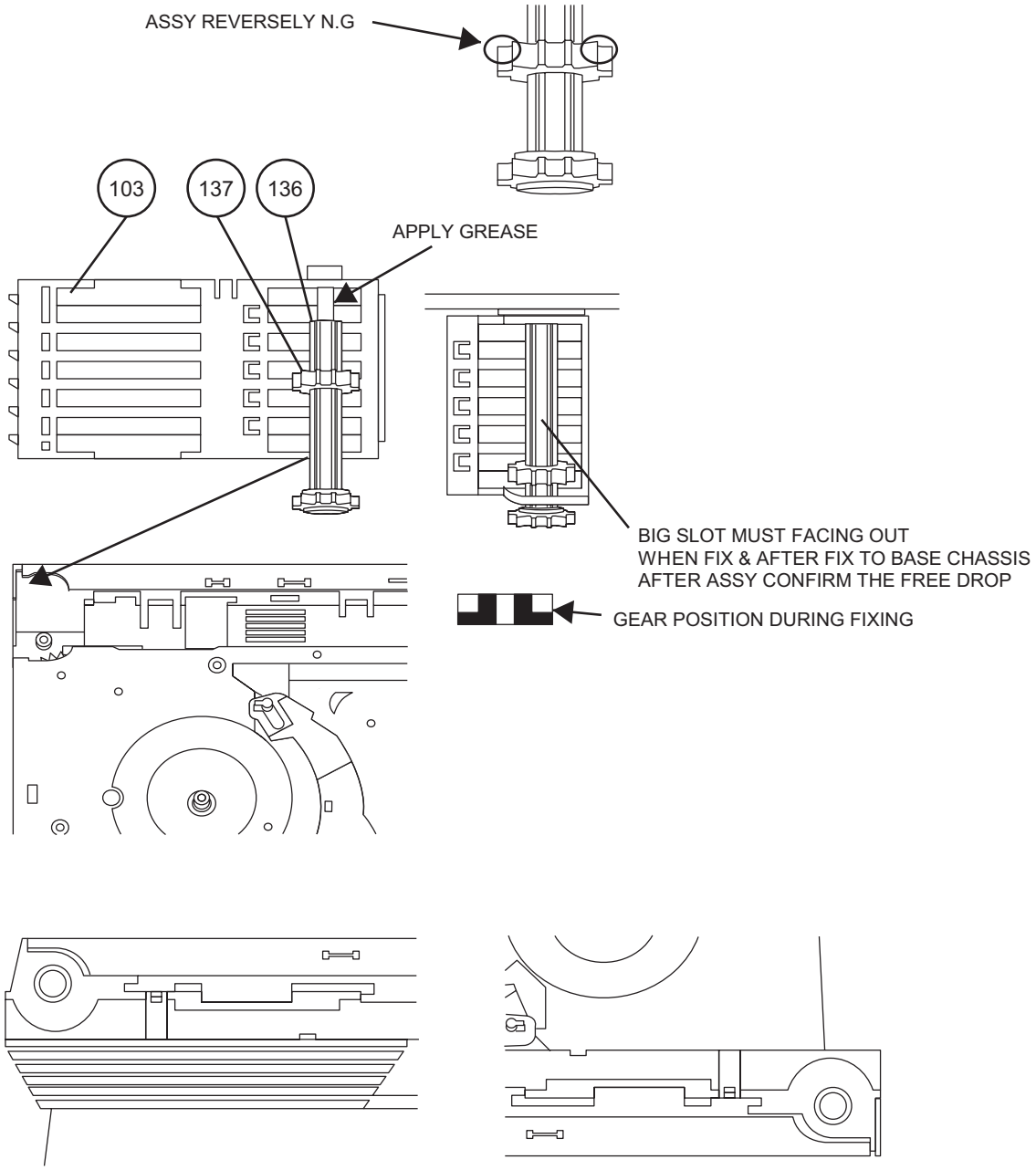
15


APPLY GREASE
113
BEHIND THE LEVER NEED TO APPLY GREASE
PULL IT THEN LEVER WILL MOVE IN

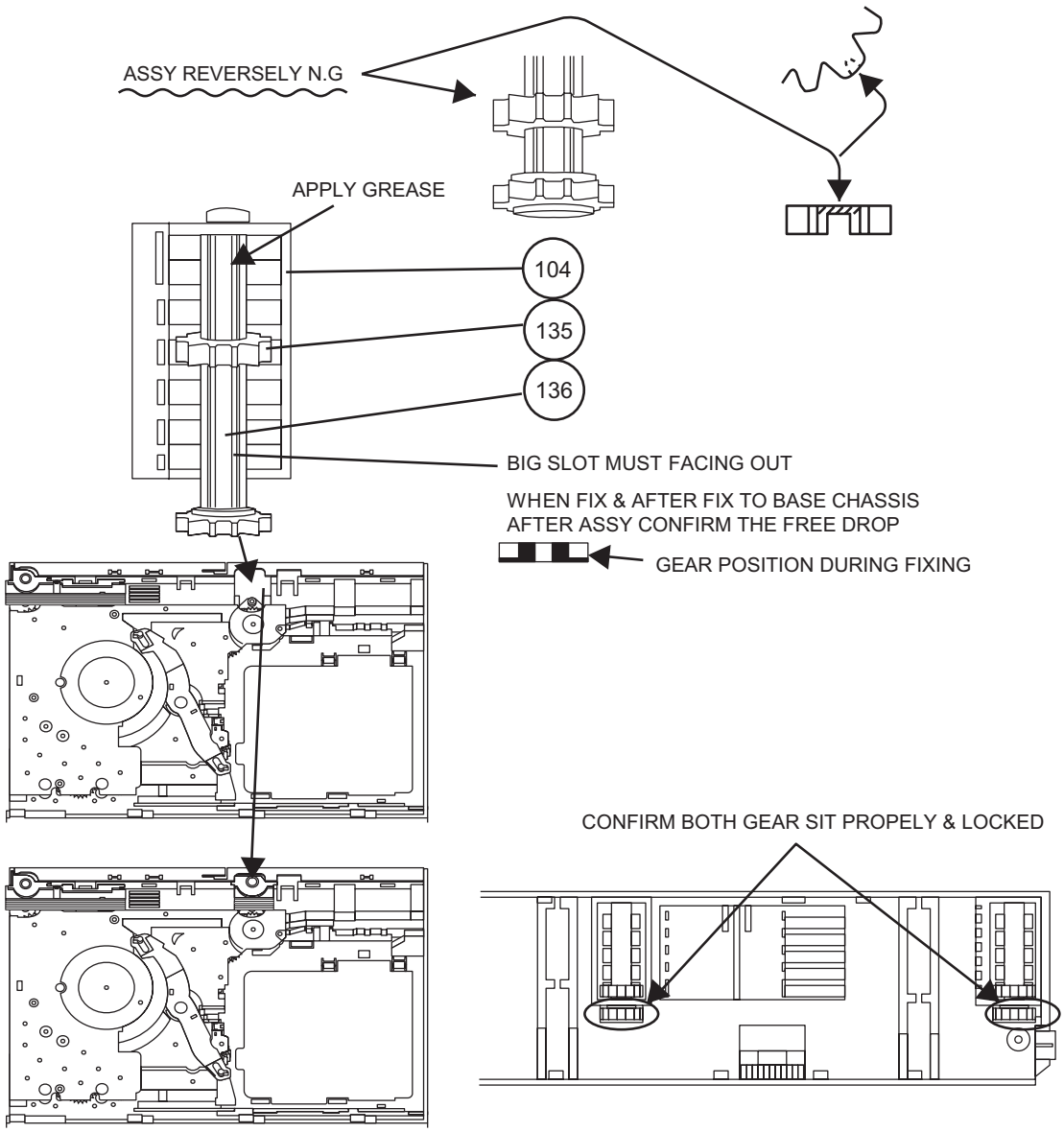
16


123
115
APPLY GREASE
APPLY GREASE BEFORE FIX
APPLY GREASE
AT BOSS
SPRING MUST ARRANGE UNDER THE HOOK
O.K
LR JOINT LEV
BOARD R
BOARD R
LR JOINT LEV
N.G

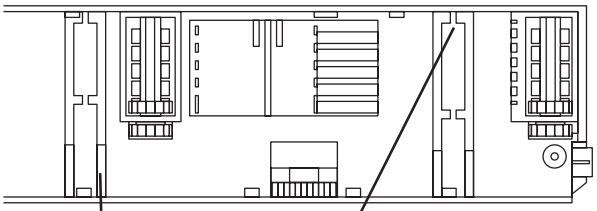
17


ASSY REVERSELY N.G
103
137
136
APPLY GREASE
BIG SLOT MUST FACING OUT
WHEN FIX & AFTER FIX TO BASE CHASSIS
AFTER ASSY CONFIRM THE FREE DROP
GEAR POSITION DURING FIXING

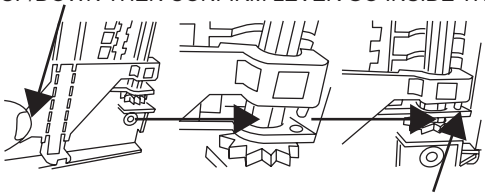
18


ASSY REVERSELY N.G
APPLY GREASE
104
135
136
BIG SLOT MUST FACING OUT
WHEN FIX & AFTER FIX TO BASE CHASSIS
AFTER ASSY CONFIRM THE FREE DROP
GEAR POSITION DURING FIXING
CONFIRM BOTH GEAR SIT PROPELY & LOCKED

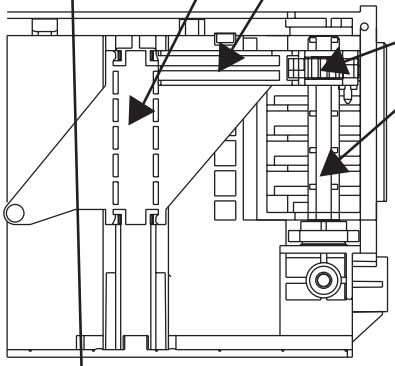
19



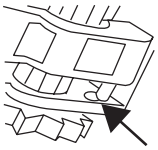
AFTER FIX OUTER UP/DOWN LEVER HOLD SHOWN PORTION AND
MOVE UP/DOWN THEN CONFIRM LEVER GO INSIDE THE HOLE OR NOT



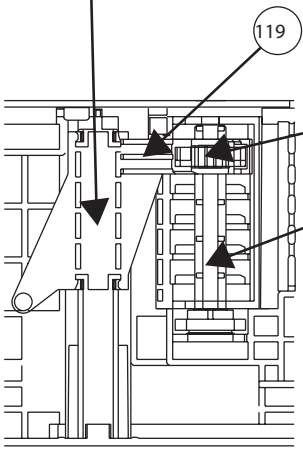
IF GO INSIDE HOLE
IS O.K



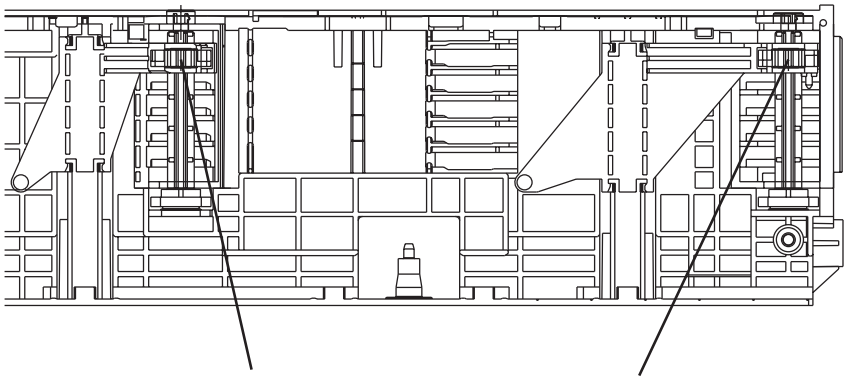
BIGGER SLOT FACING OUT



IF NO GO INSIDE HOLE IS N.G

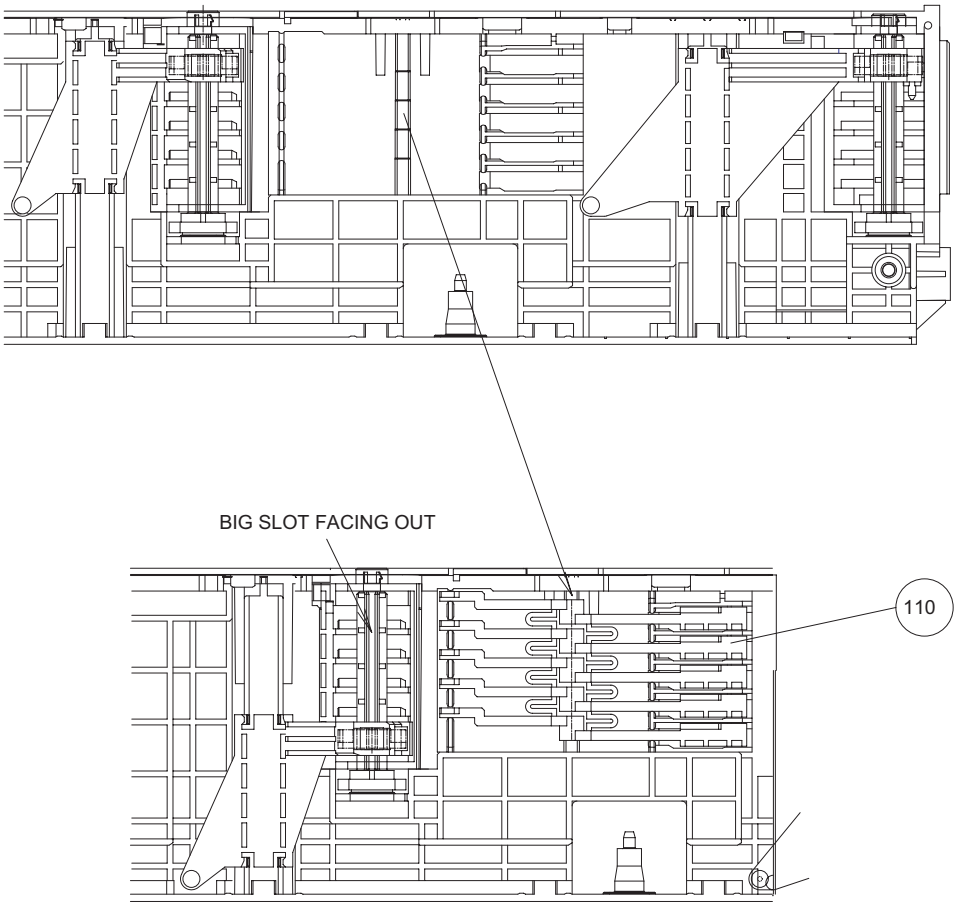


BIGGER SLOT FACING OUT

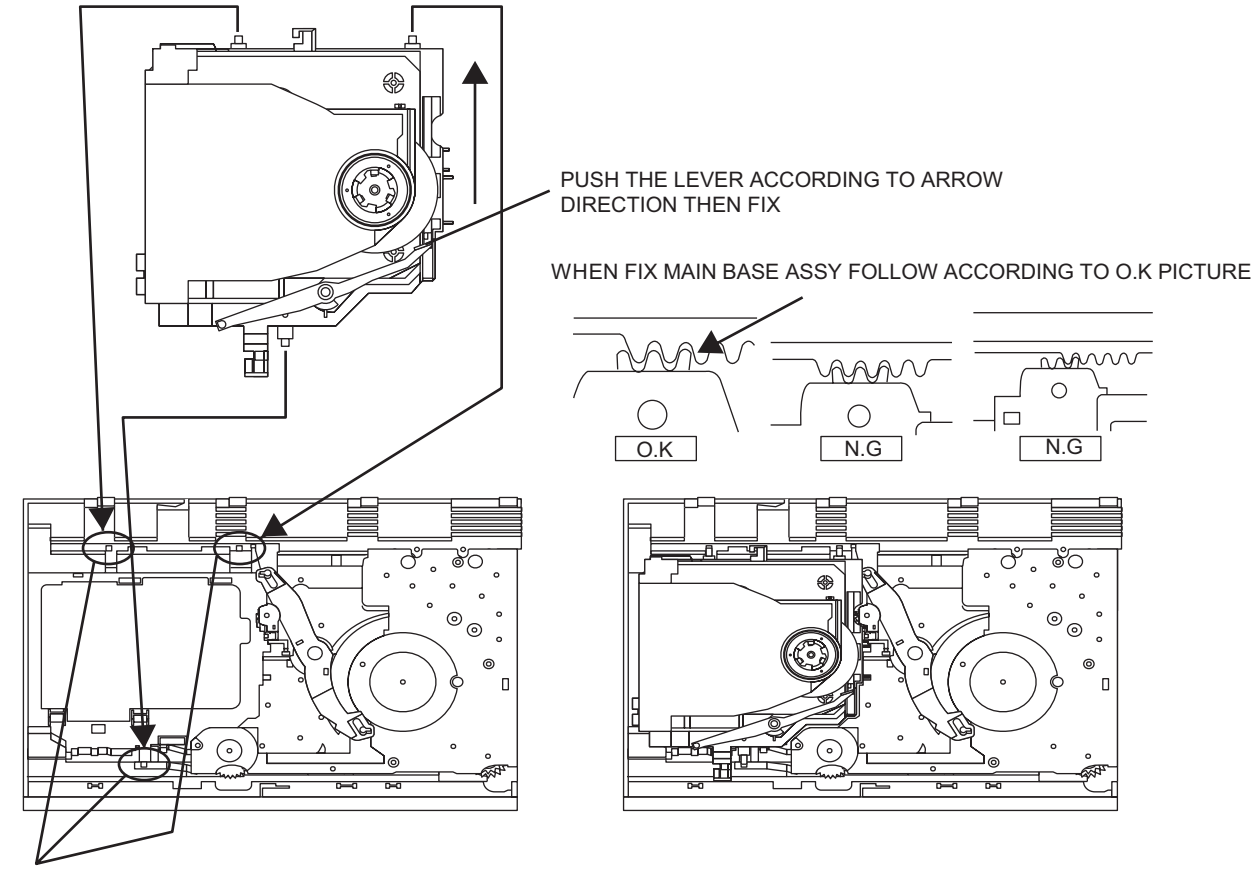


ALL OF THIS 135 AND 137 GEAR FIX TOGETHER WITH 119
AND 120 LEVER (MOVE TOGETHER)

20

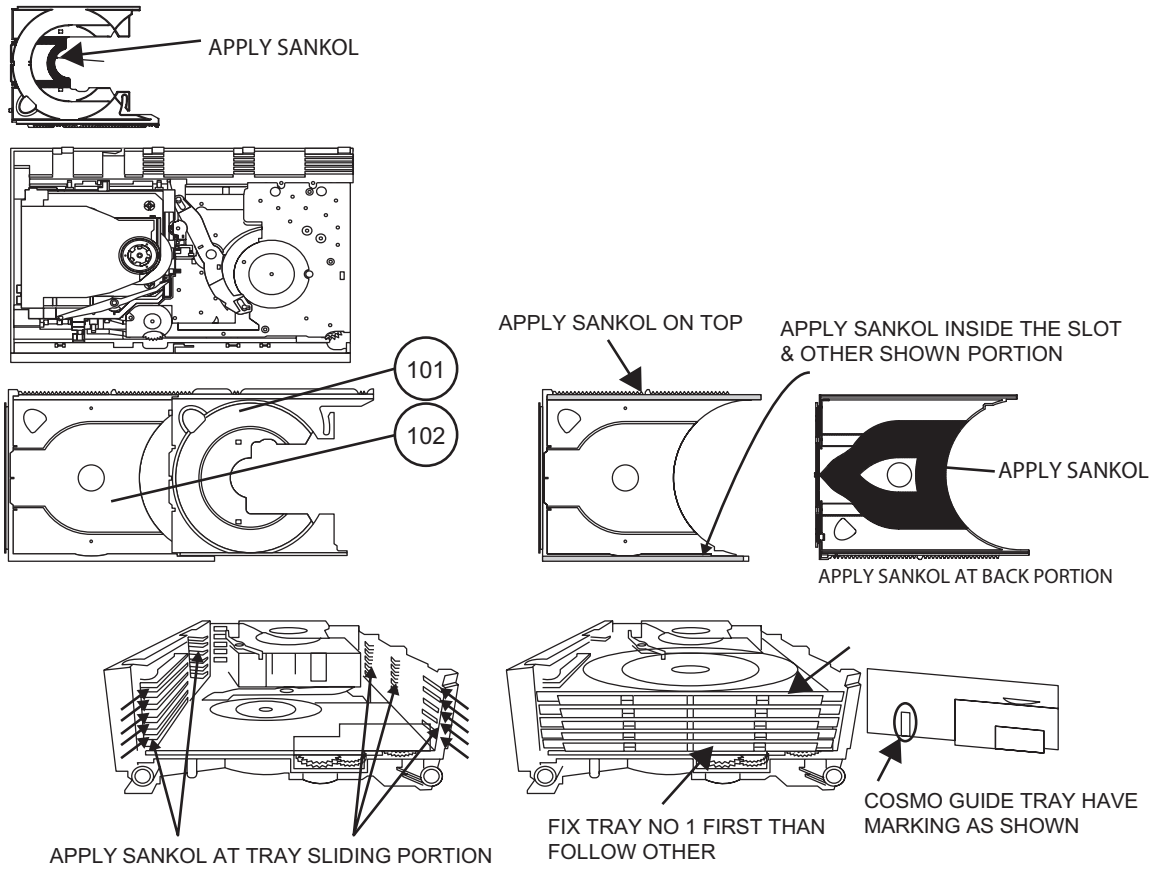


21

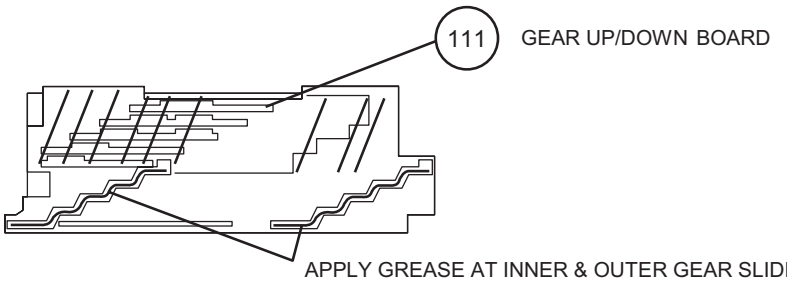


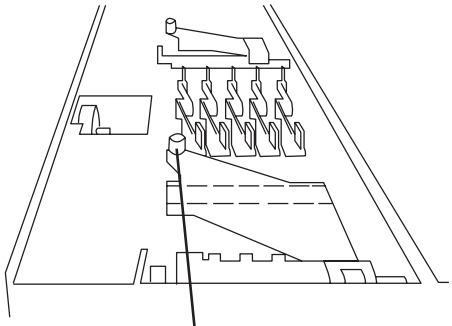
MAKE SURE MECHA HOLDER SHAFT FIX PROPELY TO LEVER

22

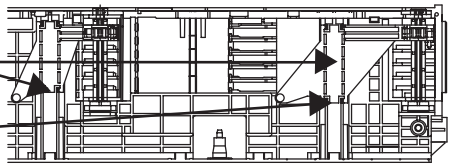

APPLY SANKOL
101
102
APPLY SANKOL ON TOP
APPLY SANKOL INSIDE THE SLOT
& OTHER SHOWN PORTION
APPLY SANKOL
APPLY SANKOL AT BACK PORTION
APPLY SANKOL AT TRAY SLIDING PORTION
FIX TRAY NO 1 FIRST THAN
FOLLOW OTHER
COSMO GUIDE TRAY HAVE
MARKING AS SHOWN

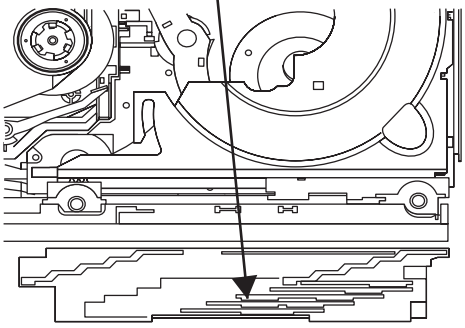
23

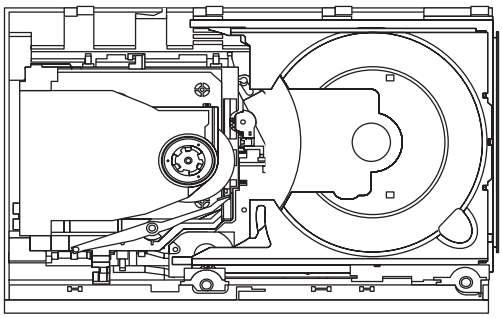




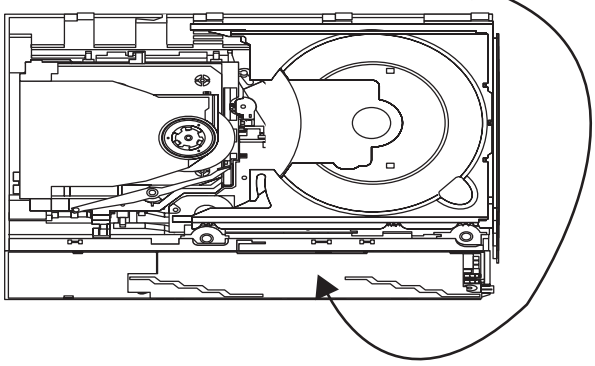
WHEN FIX GEAR UP/ DOWN BOARD THE TWO LEVER MUST AT PARALLEL LINE & POSITION AT TOP MAX SIDE



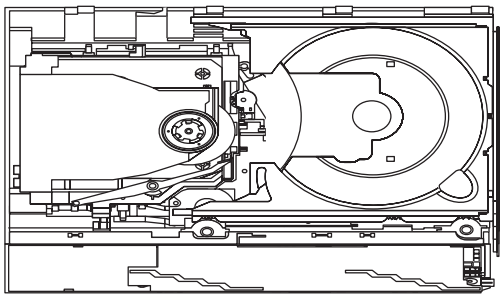




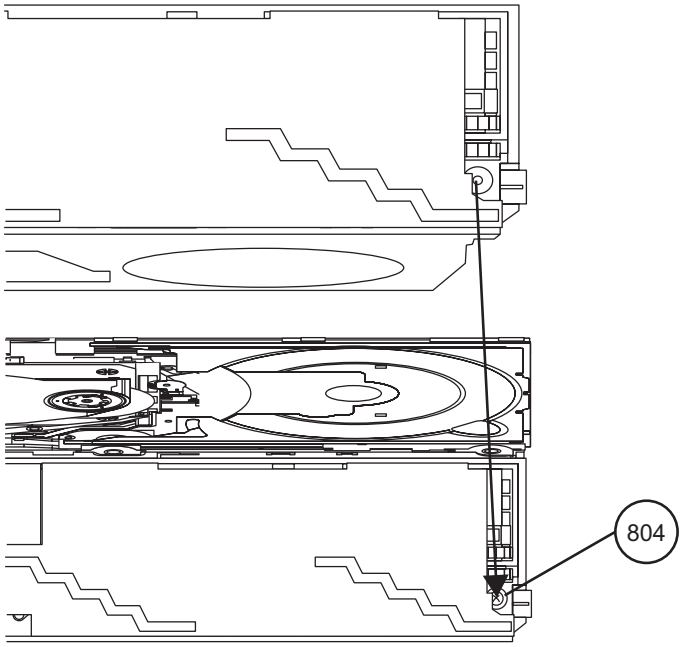
AFTER ASSY GEAR UP/DOWN BOARD

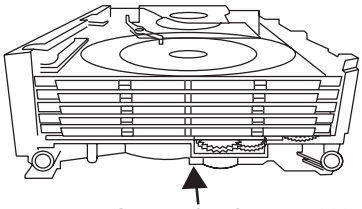


24



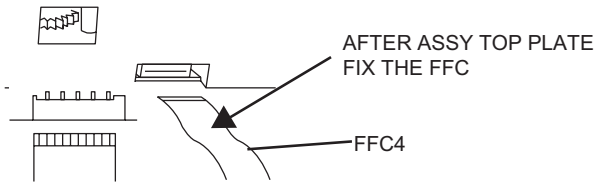
SCREW TORQUE
3 $^{+0.5}_{-0}$ kgf-cm

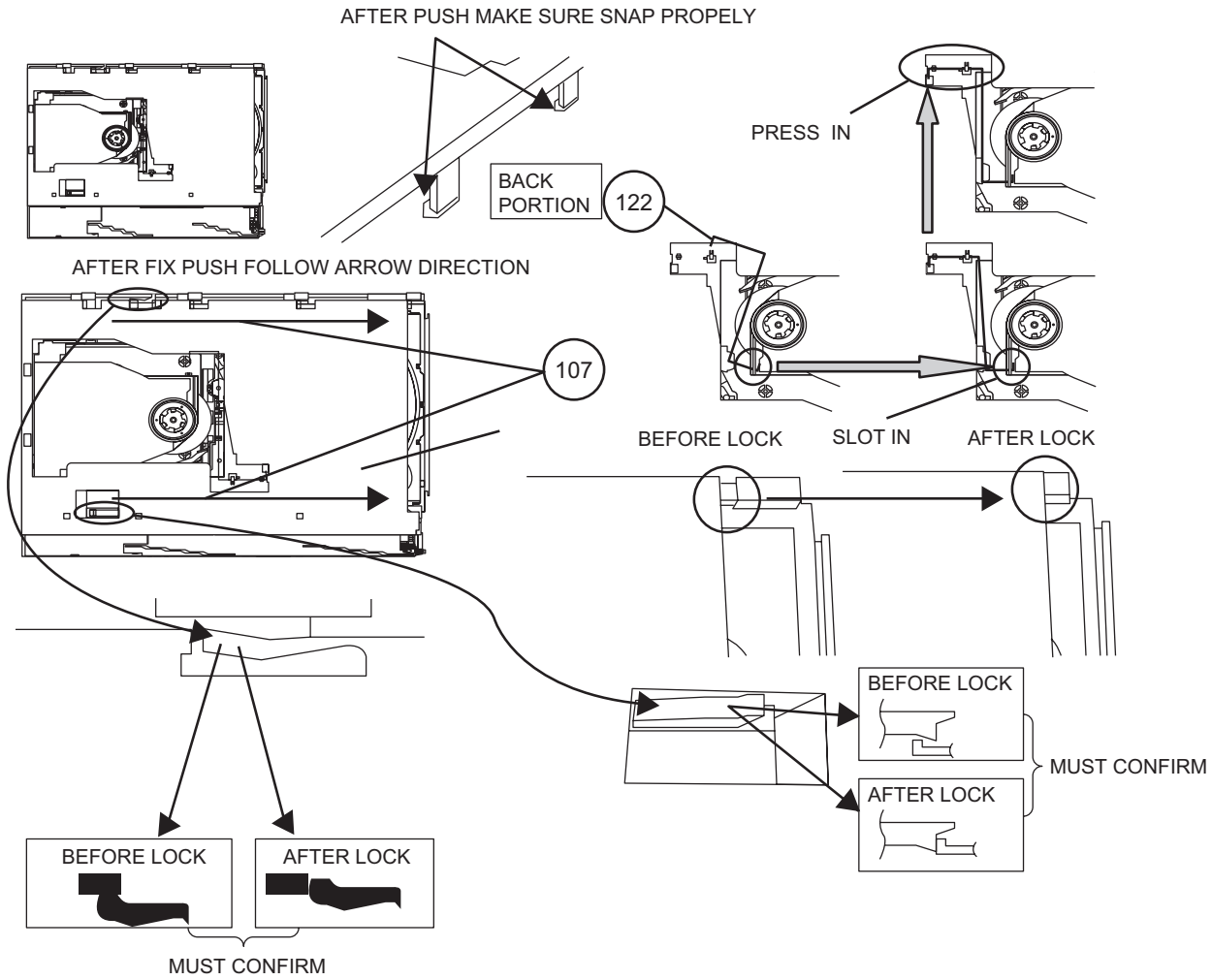




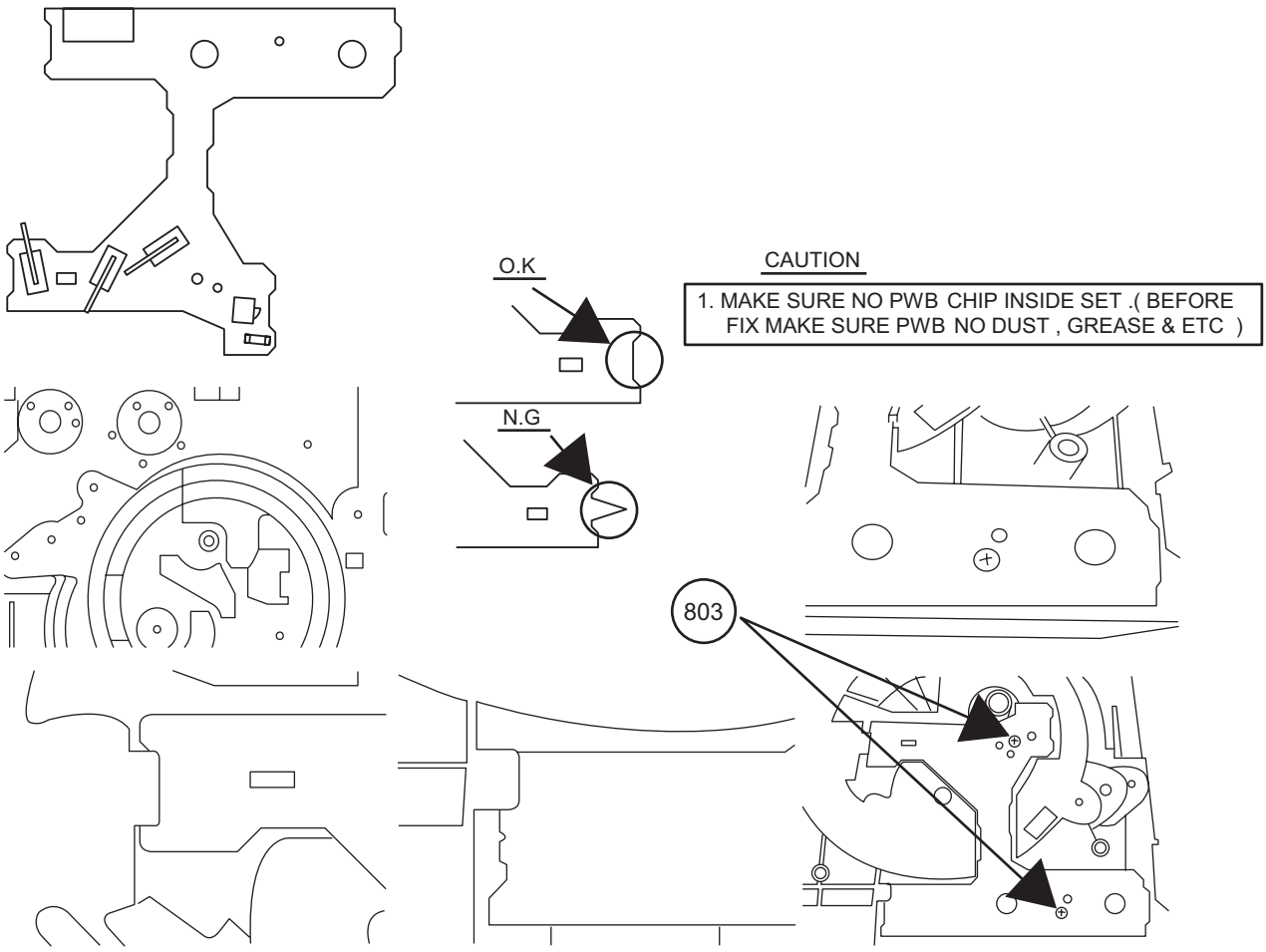
ROTATE THE GEAR TO MOVE UP 111 GEAR
UP AND DOWN BOARD BEFORE SCREW

25

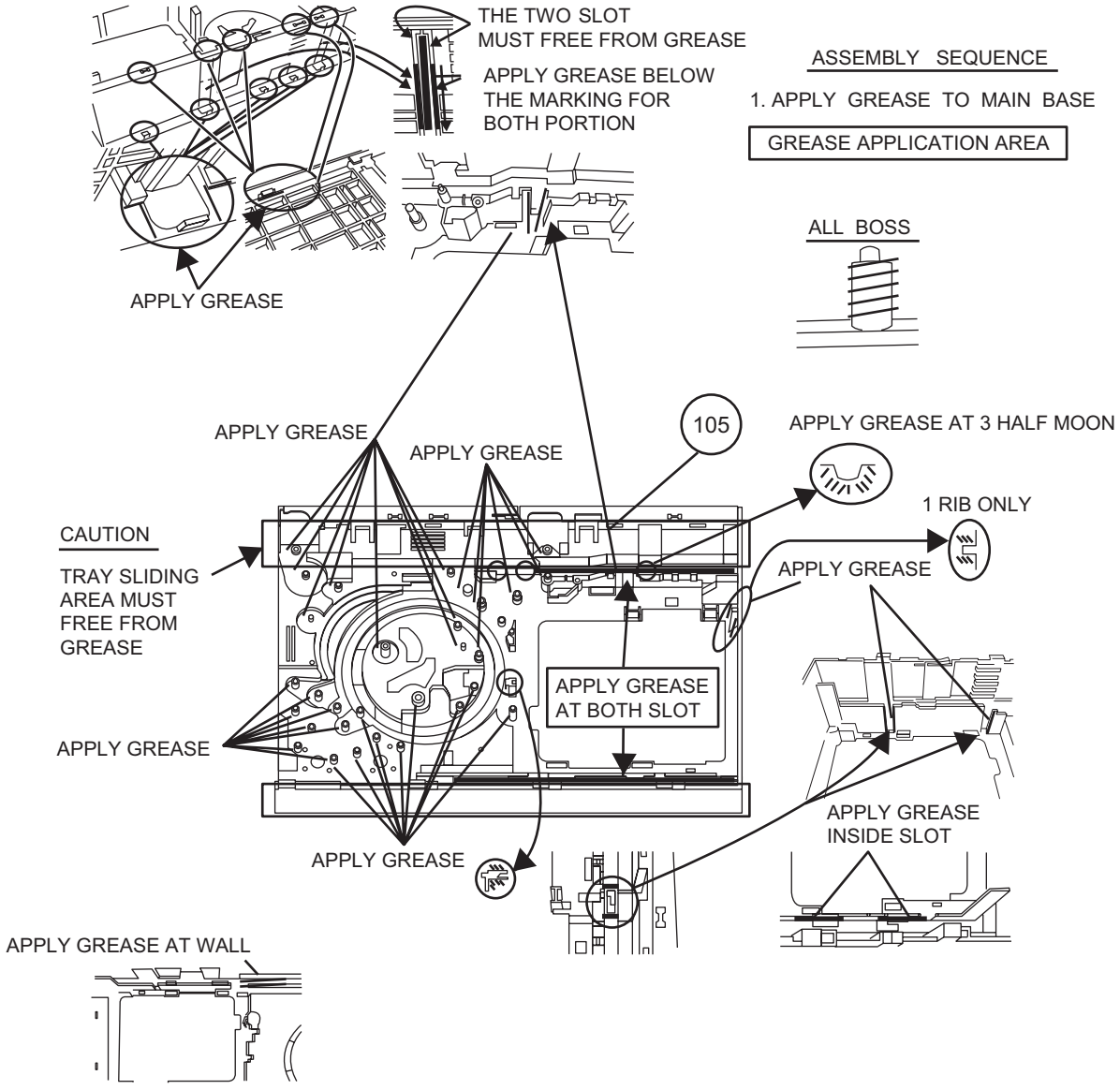

AFTER ASSY TOP PLATE
FIX THE FFC
FFC4


AFTER PUSH MAKE SURE SNAP PROPELY
PRESS IN
BACK
PORTION
122
AFTER FIX PUSH FOLLOW ARROW DIRECTION
107
BEFORE LOCK
SLOT IN
AFTER LOCK
BEFORE LOCK
AFTER LOCK
MUST CONFIRM
BEFORE LOCK
AFTER LOCK
MUST CONFIRM

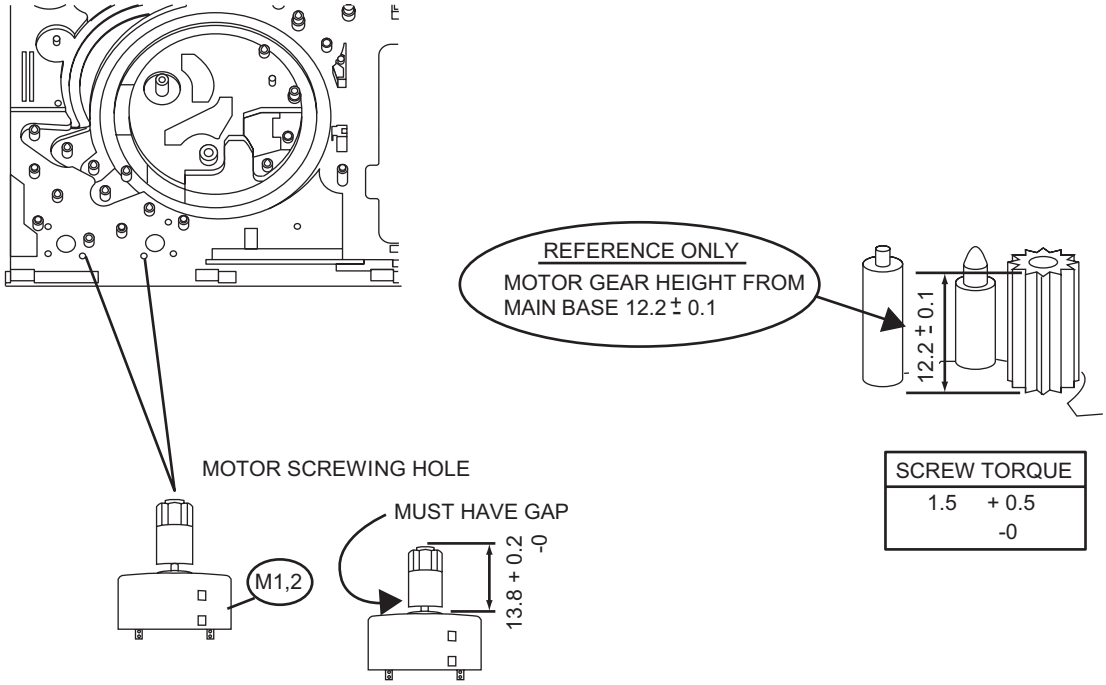
26

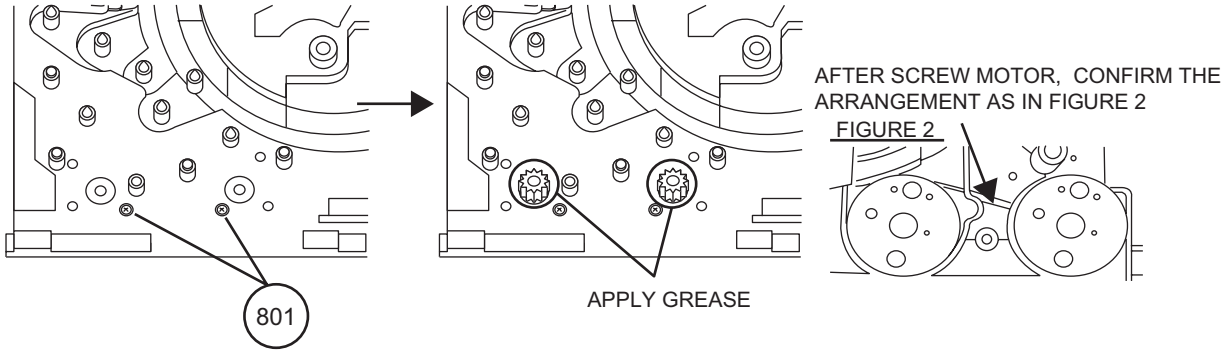

O.K
N.G
CAUTION
1. MAKE SURE NO PWB CHIP INSIDE SET .(BEFORE FIX MAKE SURE PWB NO DUST , GREASE & ETC)
803

27

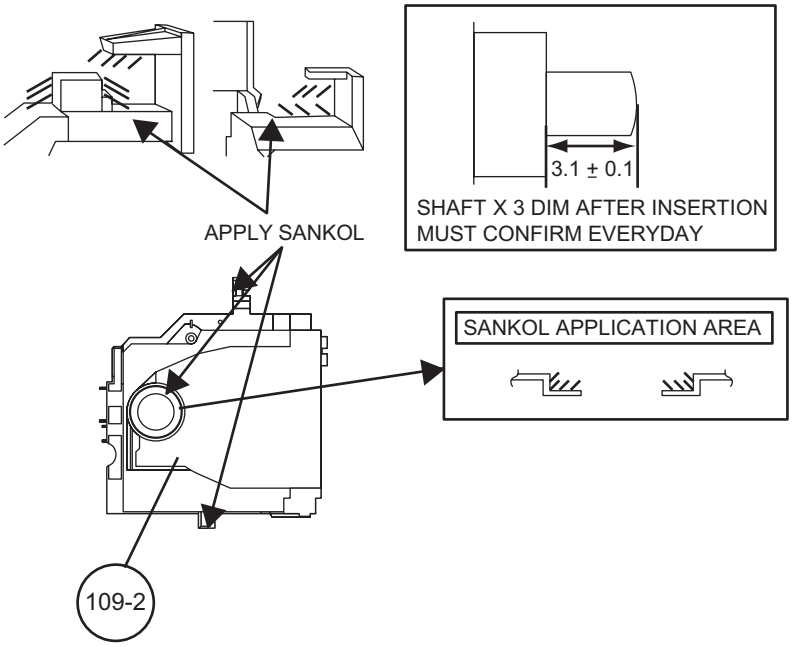

THE TWO SLOT
MUST FREE FROM GREASE
APPLY GREASE BELOW
THE MARKING FOR
BOTH PORTION
ASSEMBLY SEQUENCE
1. APPLY GREASE TO MAIN BASE
GREASE APPLICATION AREA
ALL BOSS
APPLY GREASE
APPLY GREASE
APPLY GREASE
105
APPLY GREASE AT 3 HALF MOON
1 RIB ONLY
CAUTION
TRAY SLIDING
AREA MUST
FREE FROM
GREASE
APPLY GREASE
APPLY GREASE
AT BOTH SLOT
APPLY GREASE
APPLY GREASE
APPLY GREASE
INSIDE SLOT
APPLY GREASE AT WALL

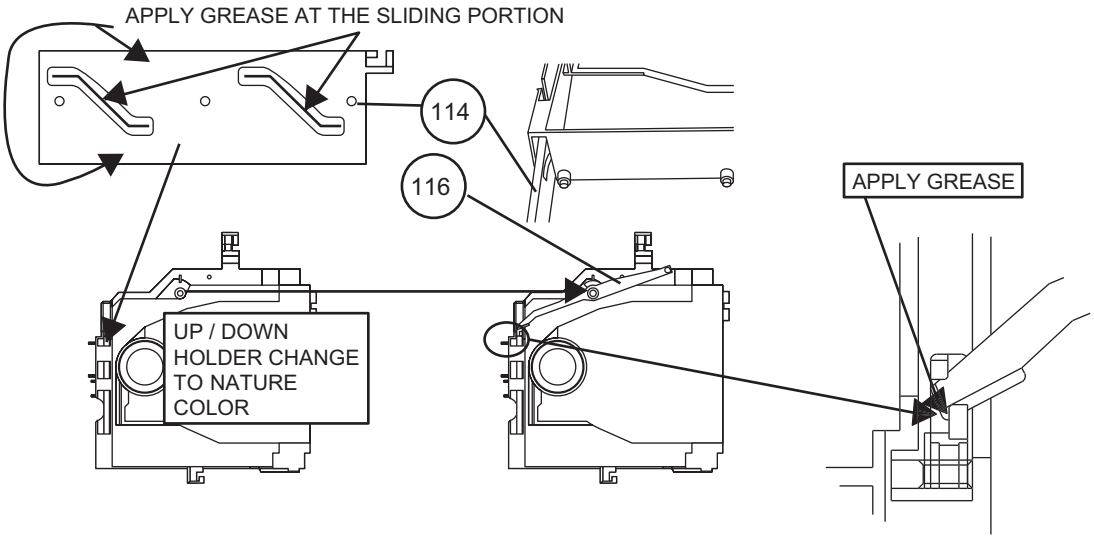
28


REFERENCE ONLY
MOTOR GEAR HEIGHT FROM
MAIN BASE 12.2 ± 0.1
12.2 ± 0.1
MOTOR SCREWING HOLE
M1,2
MUST HAVE GAP
13.8 + 0.2 -0
SCREW TORQUE
1.5 + 0.5 -0

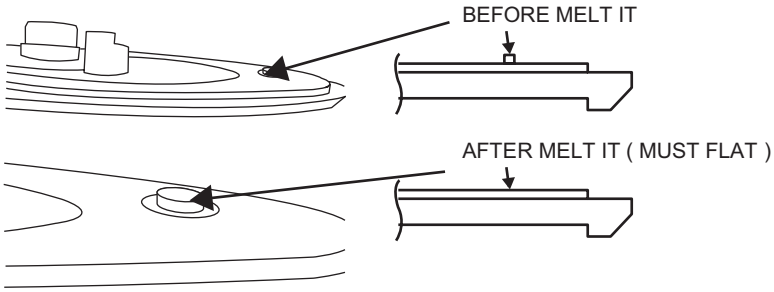

801
APPLY GREASE
AFTER SCREW MOTOR, CONFIRM THE
ARRANGEMENT AS IN FIGURE 2
FIGURE 2

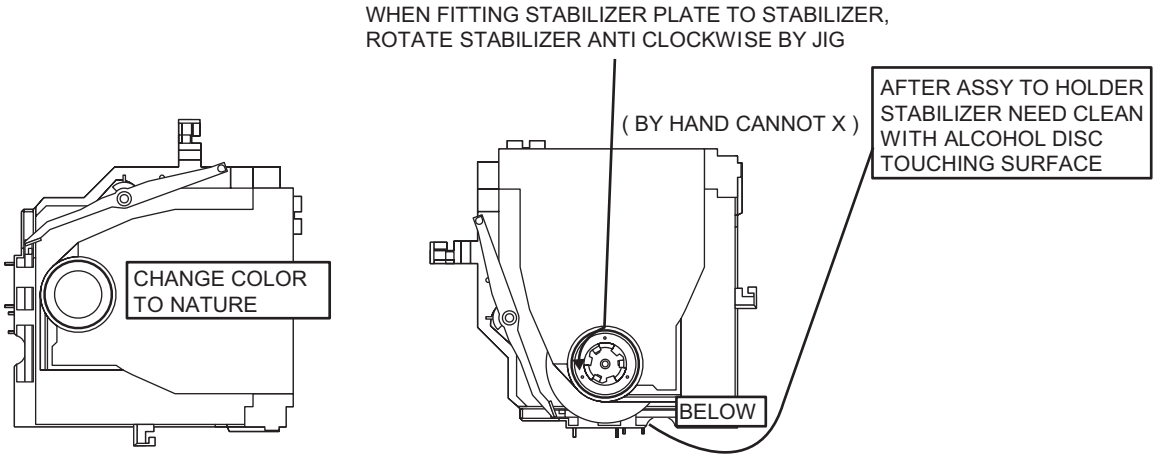
29


3.1 ± 0.1
SHAFT X 3 DIM AFTER INSERTION
MUST CONFIRM EVERYDAY
APPLY SANKOL
SANKOL APPLICATION AREA
109-2

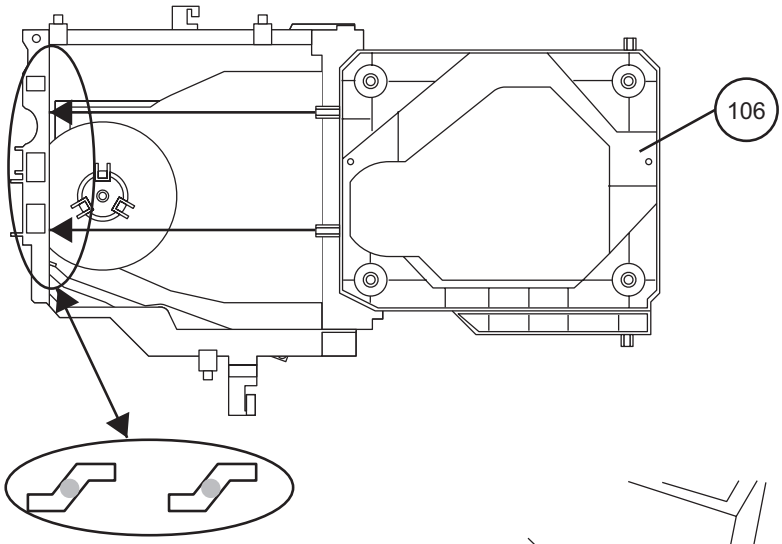

APPLY GREASE AT THE SLIDING PORTION
114
116
APPLY GREASE
UP / DOWN
HOLDER CHANGE
TO NATURE
COLOR

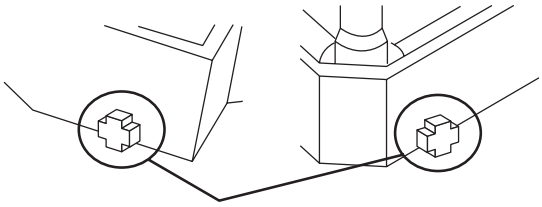
30

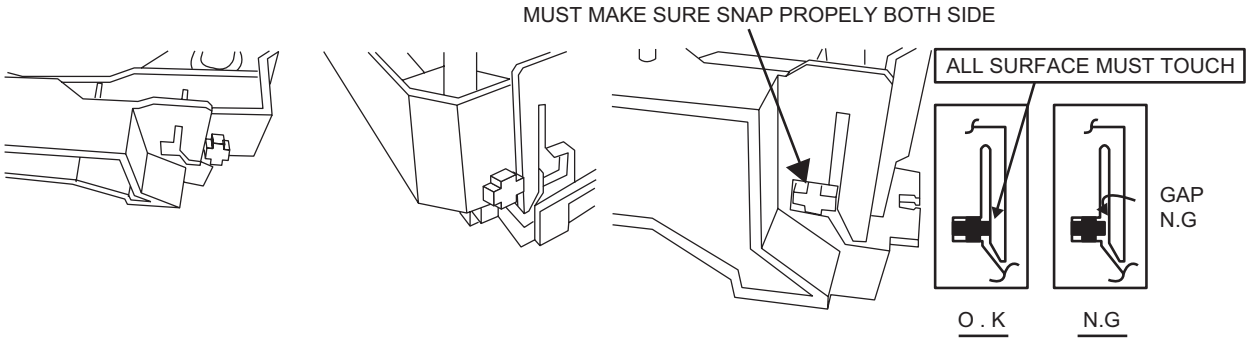

BEFORE MELT IT
AFTER MELT IT (MUST FLAT)


WHEN FITTING STABILIZER PLATE TO STABILIZER,
ROTATE STABILIZER ANTI CLOCKWISE BY JIG
(BY HAND CANNOT X)
AFTER ASSY TO HOLDER
STABILIZER NEED CLEAN
WITH ALCOHOL DISC
TOUCHING SURFACE
CHANGE COLOR
TO NATURE
BELOW

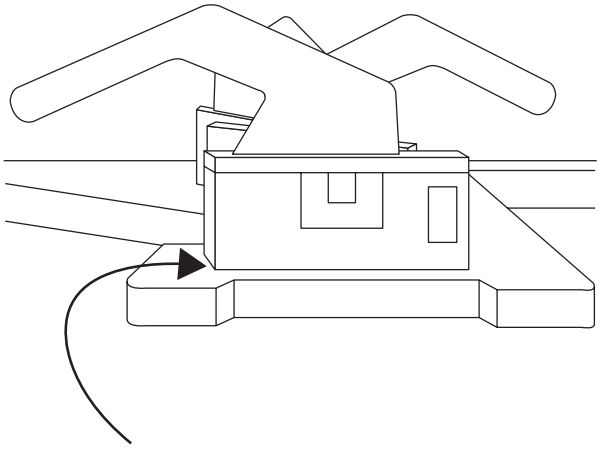
31


106


APPLY GREASE

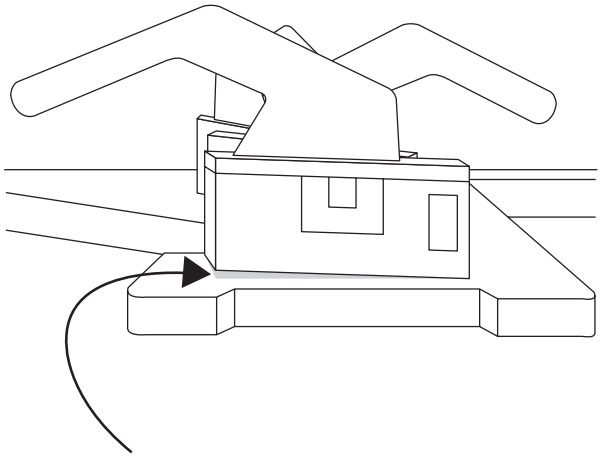

MUST MAKE SURE SNAP PROPELY BOTH SIDE
ALL SURFACE MUST TOUCH
GAP
N.G
O . K
N.G

32



NO GAP

O.K



HAVE GAP

N.G

CHAPTER 3. MECHANICAL DESCRIPTION

[1] REMOVING AND REINSTALLING THE MAIN PARTS

1. CD MECHANISM SECTION

Perform steps 1, 2, 9, 10, 11 and 12 of the disassembly method to remove the CD mechanism.

1.1. Remove the pickup. (See Fig. 1)

1. Remove the stop washer (A1) x 1 pc., to remove the gear (A2) x 1 pc.
2. Remove the screws (A3) x 2 pcs., to remove the shaft (A4) x 1 pc.
3. Remove the pickup.

Note

After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

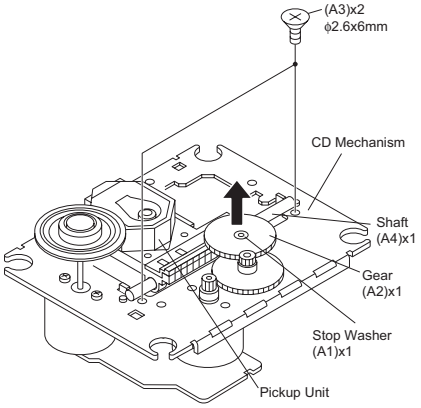


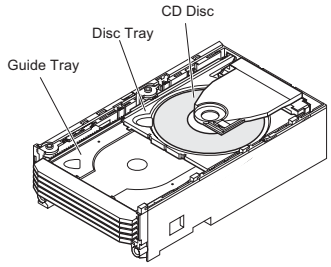
Figure 1

2. CHANGER MECHANISM SECTION

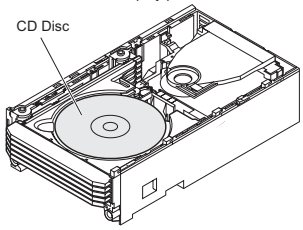
Perform steps 1, 2, 9 and 10 of the disassembly method to remove the CD changer mechanism.

2.1. How to remove CD Disc (See Fig. 2~5)

1. When CD is at play position (Figure 2), rotate reduction gear C clock-wise as shown in Figure 3 Until disc tray is at stock position, then rotate further to eject the disc tray so that CD can be removed from the tray.



CD At play position.



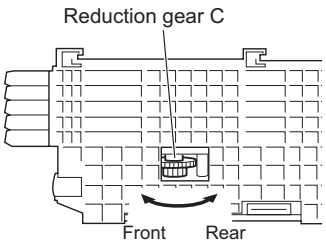


Figure 3

2. In another case, if CD mechanism is at tray No.1 play position and to remove CD located in tray No.3, the procedure is as follows:

   If the gear up down board is located at tray No.1 position, then rotate gear clock-wise until it at stock position. Rotate reduction gear D clockwise (Figure 4) to move the CD mechanism to tray No.3 position.This is confirmed by checking the gear up down board position by the marking as indicated on the main chassis as shown in Figure 5.

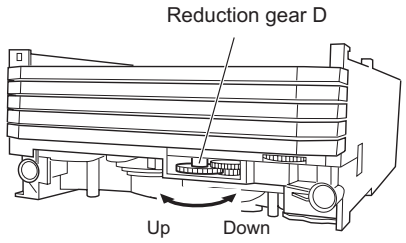


Figure 4

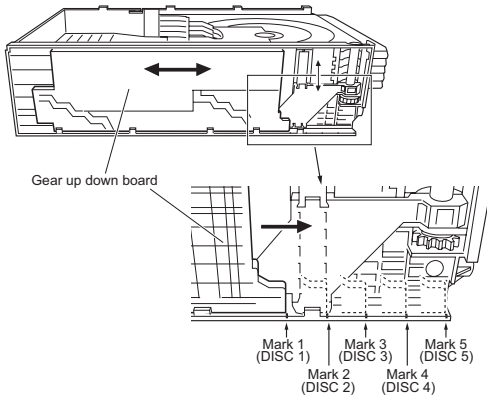


Figure 5

2.2. How to Remove the tray motor/main cam motor/5-Changer Motor PWB (See Fig. 1)

1. Remove the screws (A1)x 2 pcs., to remove tray motor/main cam motor/5-Changer Motor PWB.

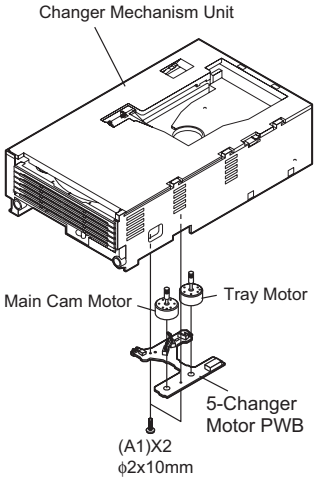


Figure 1

NOTE: There are 2 more screws tighten the motors at the bottom of main chassis. Before performing procedure 1 above, disc stop spring, top plate sear up down board and trays must be removed, then only the 2 screws can be untighten.

Caution on disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1) Take cassette tape and compact disc out of the unit.
2) Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3) Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4) Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw.....(A1) X 6	1
2	Side Panel (Left/ Right)	2. Screw.....(B1) X 8	1
3	CD Changer unit	1. Screw.....(C1) X 2 2. Hook .....(C2) X 2 3. Socket.....(C3) X 2 4. Flat Cable ....(C4) X 2	2
4	Rear Panel with Speaker PWB and Refresh PWB	1. Screw.....(D1) X 4 2. Socket.....(D2) X 1 3. Flat Cable ....(D3) X 1	2
5	Front Panel	1. Screw.....(E1) X 2 2. Flat Cable .....(E2) X 2 3. Socket.....(E3) X 1 4. Hook .....(E4) X 2	3
6	Main PWB	1. Screw.....(F1) X 4 2. Socket.....(F2) X 2	3
7	Power PWB	1. Screw.....(G1) X 4	3
8	Speaker PWB	1. Screw.....(H1) X 2	4
9	Refresh PWB	1. Screw.....(J1) X 1	4
10	Display PWB	1. Knob.....(K1) X 1 2. Screw.....(K2) X 6	5
11	USB PWB	1. Screw.....(L1) X 2	5
12	Jack PWB	1. Screw.....(M1) X 1	5
13	CD MP3 PWB	1. Screw.....(N1) X 2 2. Flat Cable .....(N2) X 2 3. Socket.....(N3) X 1	6
14	CD Mechanism	1. Screw.....(P1) X 4 2. Changer Chassis.....(P2)X 4	6 7

Note:

After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of the connector so as to protect the optical pickup from electrostatic damage.

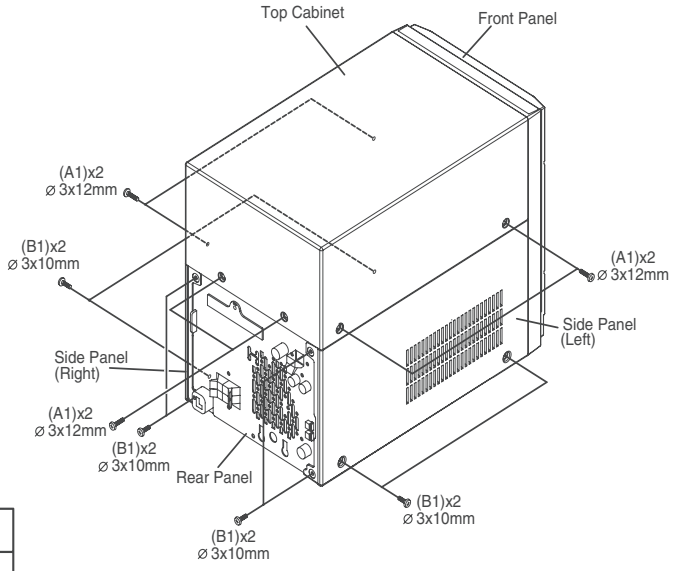


Figure 1

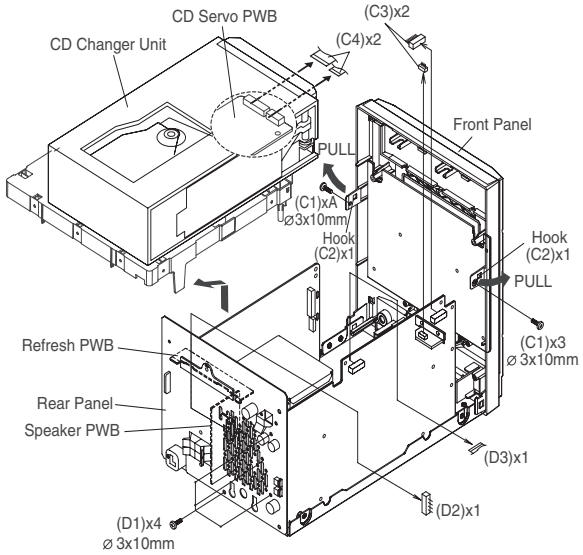
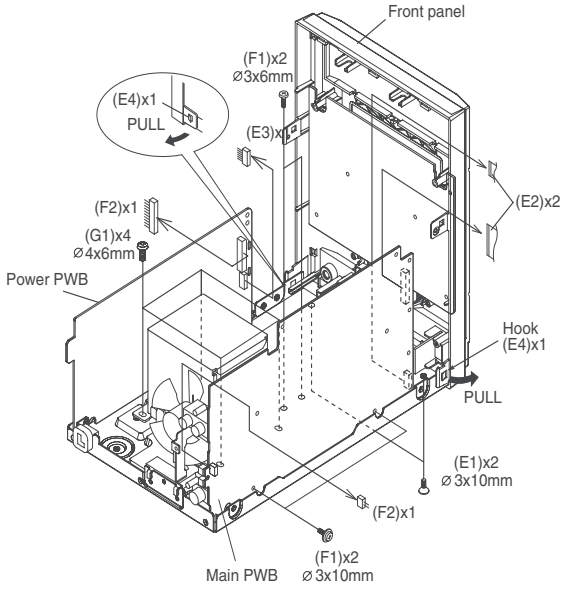


Figure 2



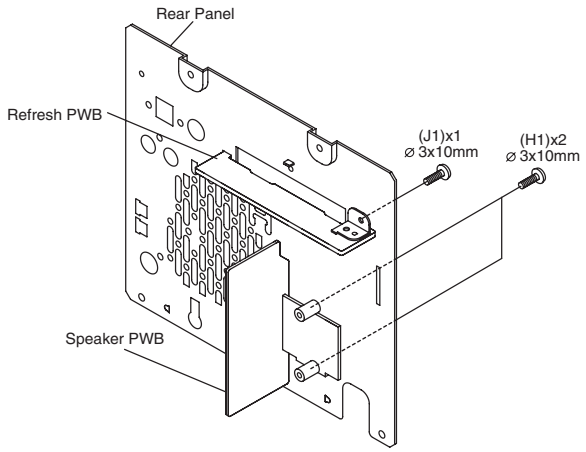


Figure 4

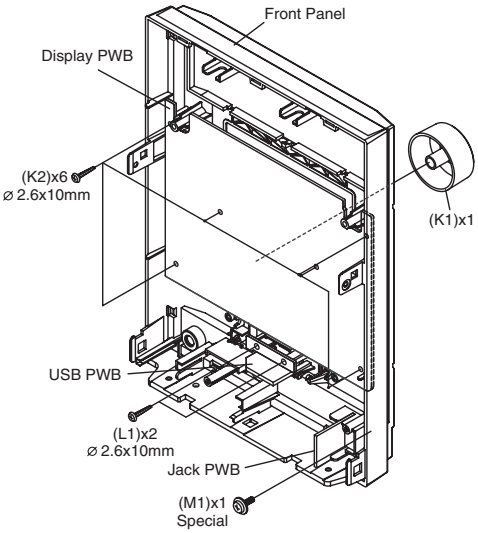


Figure 5

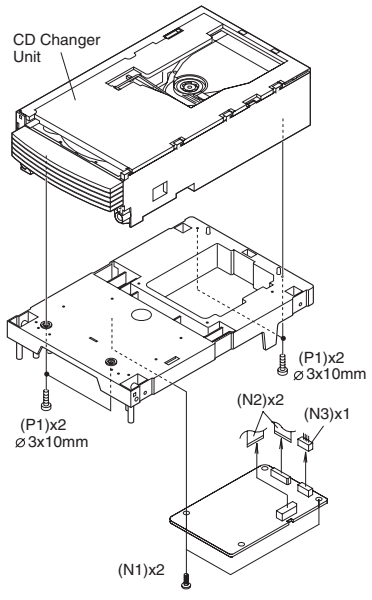


Figure 6

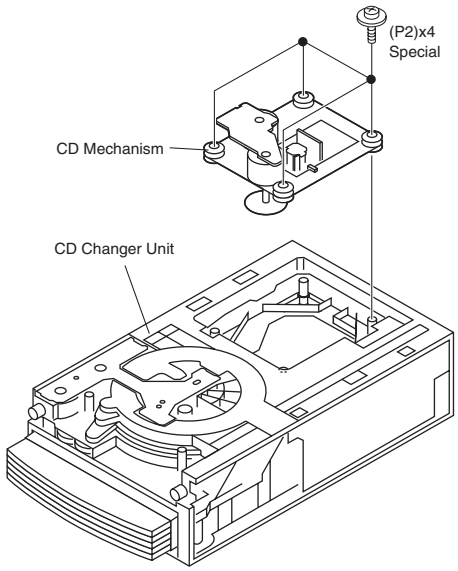


Figure 7

STEP	REMOVAL	PROCEDURE	FIGURE
1	Woofer	1. Front Panel.....(A1) X 1 2. Socket.....(A2) X 1 3. Screw.....(A3) X 2 4. Screw.....(A4) X 4	8
2	Tweeter	1. Screw.....(B1) X 2	

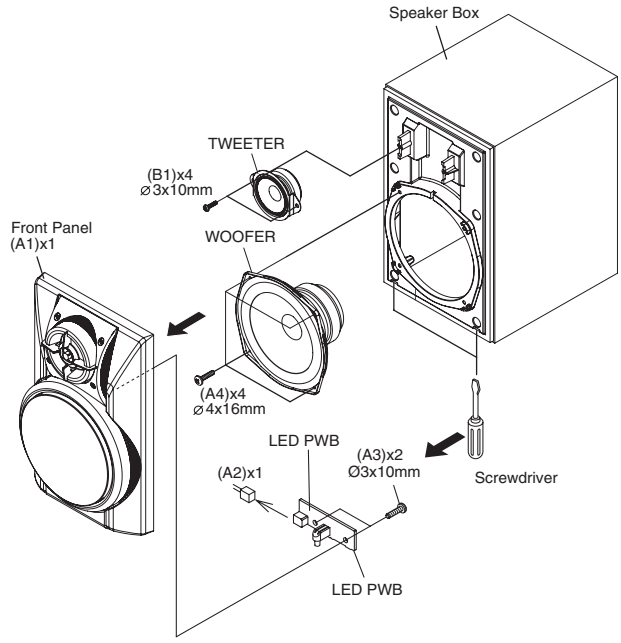


Figure 8

CHAPTER 4. BLOCK DIAGRAM

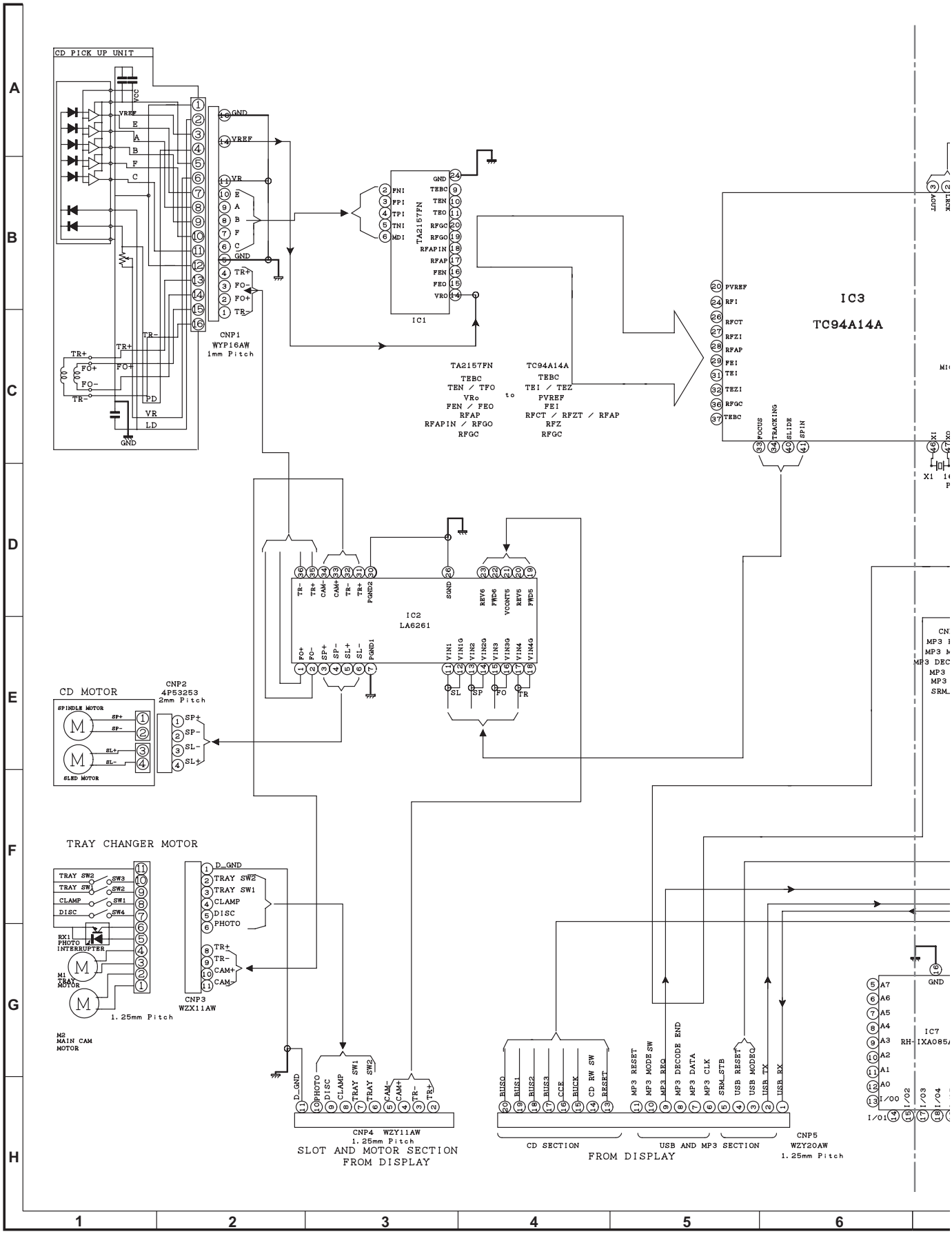
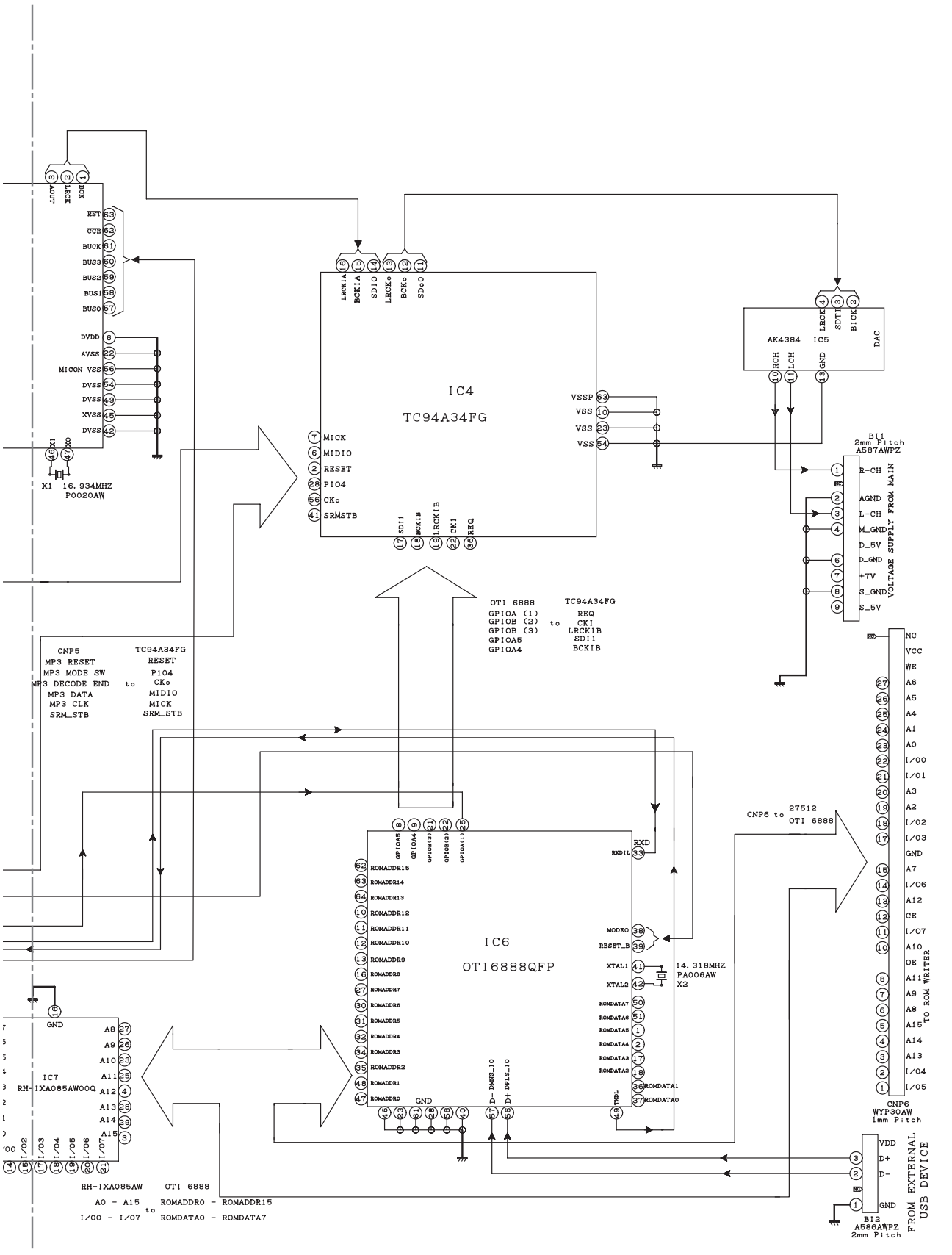


Figure 1: CD MP3 BLOCK DIAGRAM (1/2)



7	8	9	10	11	12

Figure 2: CD MP3 BLOCK DIAGRAM (1/2)

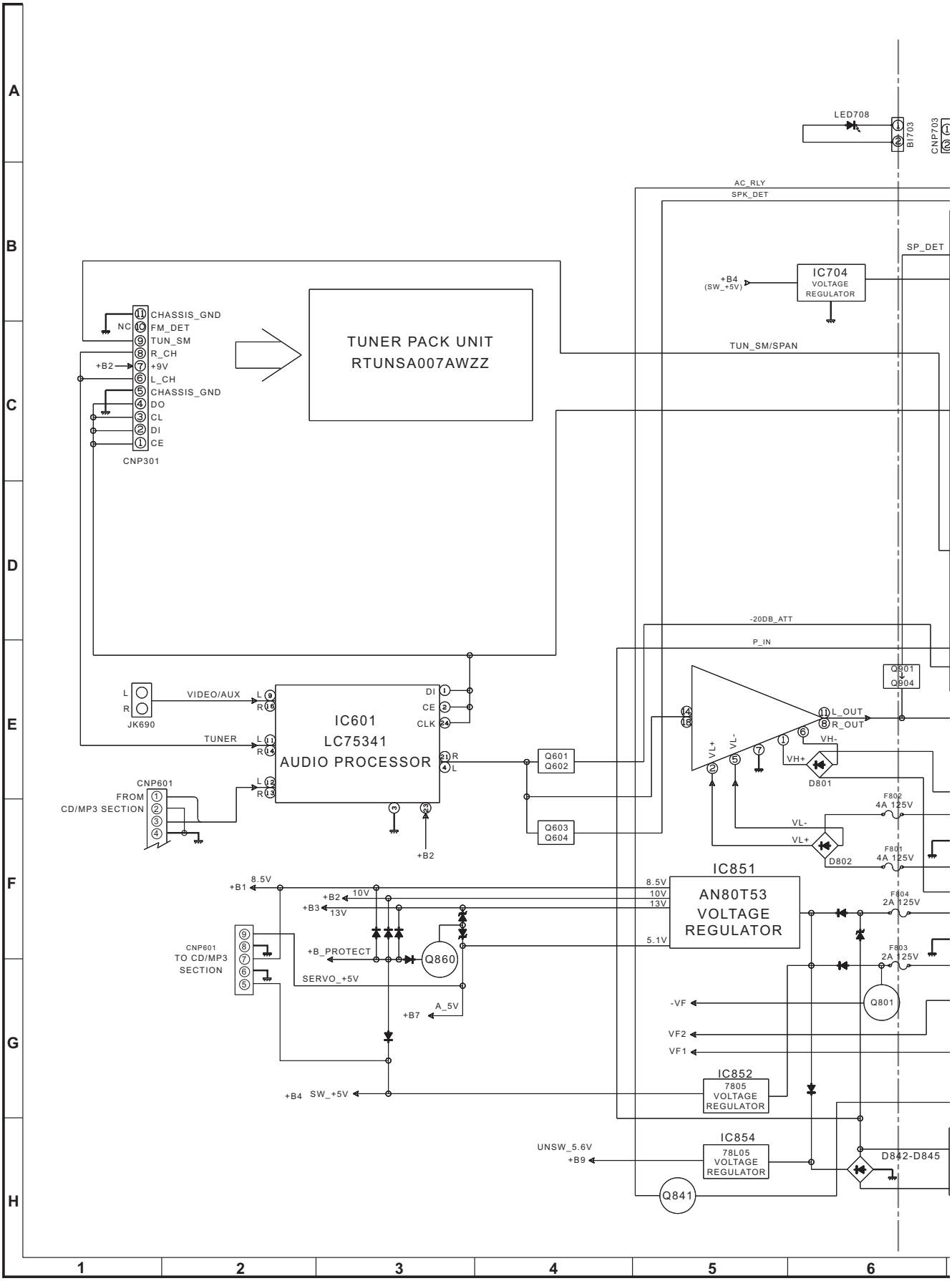
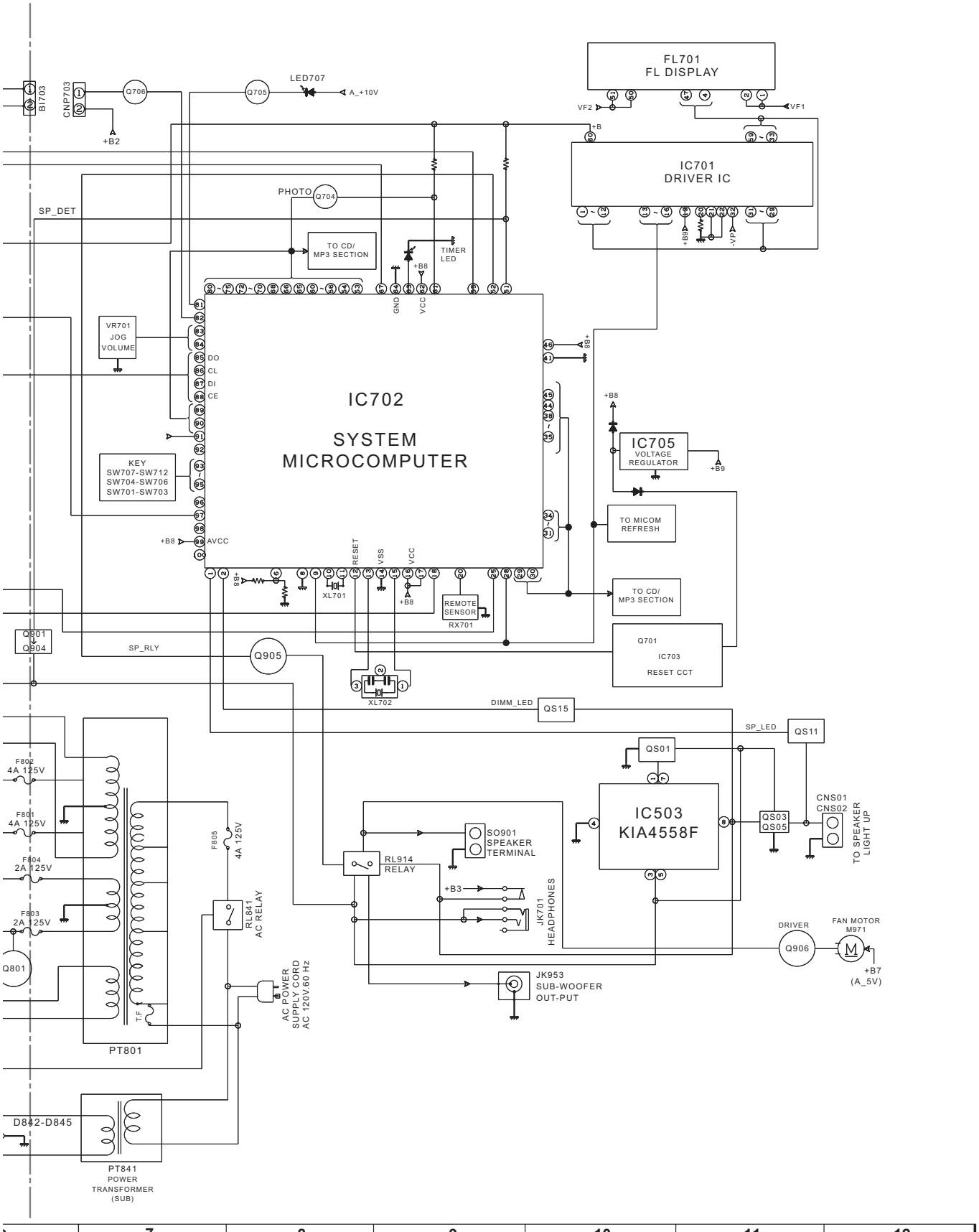


Figure 3: MAIN, DISPLAY & POWER BLOCK DIAGRAM (1/2)



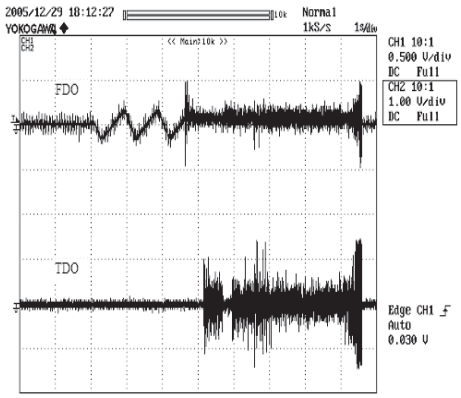
7	8	9	10	11	12

Figure 4: MAIN, DISPLAY & POWER BLOCK DIAGRAM (2/2)

CHAPTER 5. CIRCUIT DESCRIPTION

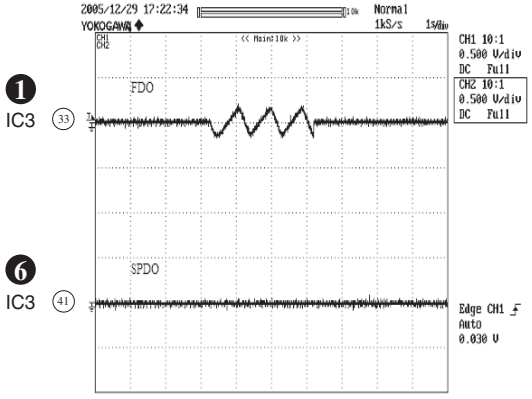
[1] WAVEFORM OF SERVO CIRCUIT

❶ IC3 (33)



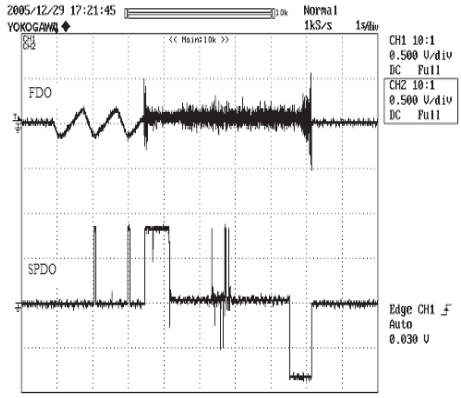
❷ IC3 (34)

❶ IC3 (33)



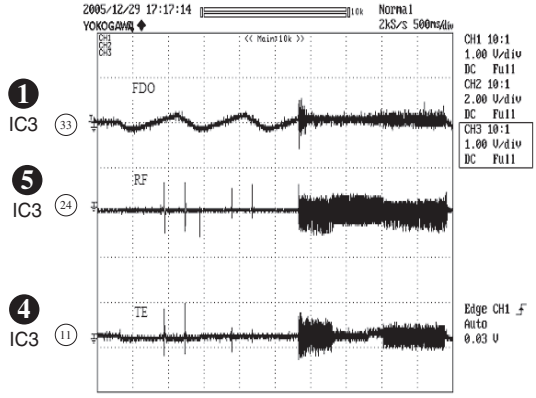
❻ IC3 (41)

❶ IC3 (33)



❻ IC3 (41)

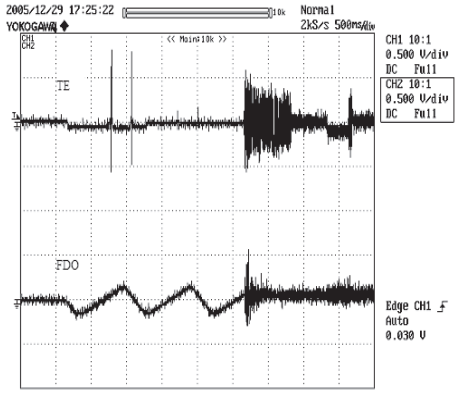
❶ IC3 (33)



❺ IC3 (24)

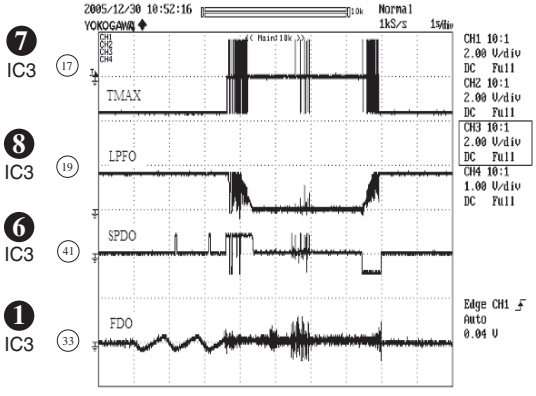
❹ IC3 (11)

❹ IC3 (31)



❶ IC3 (33)

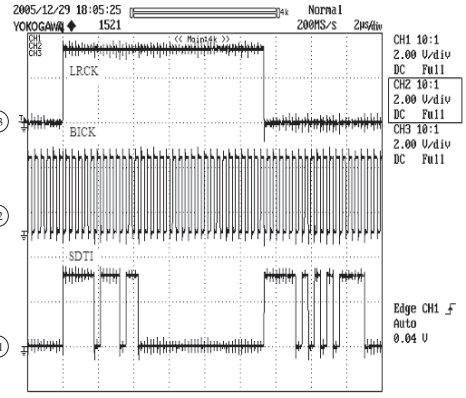
❼ IC3 (17)



❽ IC3 (19)

❻ IC3 (41)

❶ IC3 (33)

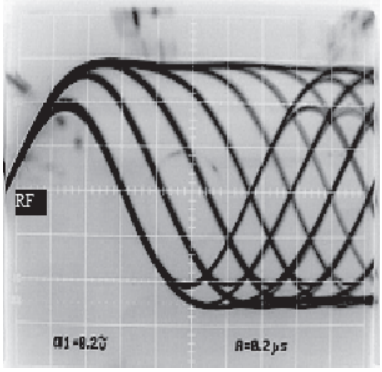


❾ IC5 (13)

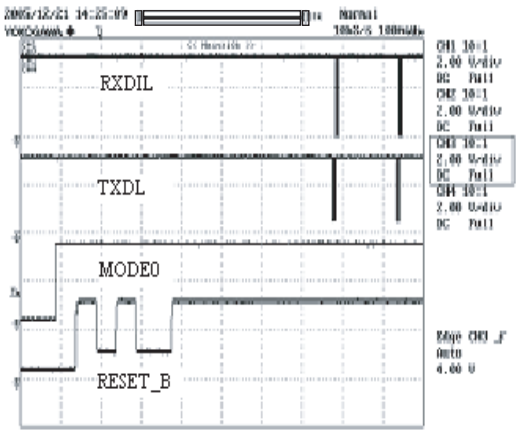
❿ IC5 (12)

⓫ IC5 (11)

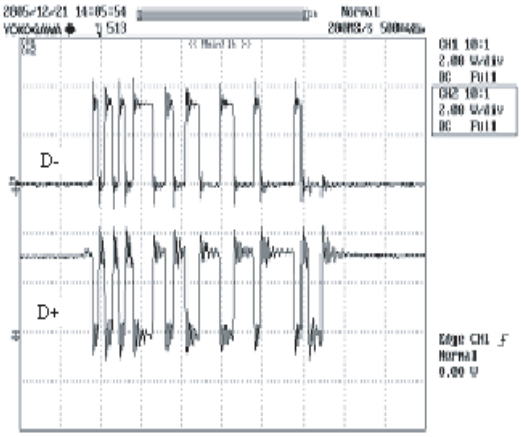
❺ IC3 (24)



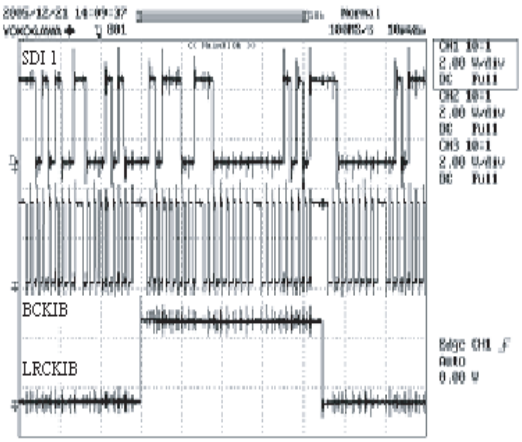
⑫ IC6 (34)
⑬ IC6 (49)
⑭ IC6 (38)
IC6 (39) ⑮



⑯ IC6 (57)
⑰ IC6 (56)



⑱ IC6 (8)
⑲ IC6 (9)
⑳ IC6 (21)



[2] IC VOLTAGE

IC 702			
PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	0	51	3.272v
2	0	52	3.106v
3	0	53	3.269v
4	0	54	3.268v
5	0	55	3.106v
6	0	56	3.202v
7	0	57	3.202v
8	0	58	3.202v
9	0	59	3.202v
10	0.417v	60	0
11	0.643v	61	0
12	3.177v	62	3.205v
13	1.493v	63	0
14	0	64	0
15	1.385v	65	0
16	3.204v	66	0
17	3.202v	67	0
18	1.292v	68	0
19	0	69	0
20	3.164v	70	0
21	3.201v	71	0
22	0	72	0
23	0	73	0
24	0	74	0
25	0	75	0
26	0	76	0
27	0	77	0
28	3.201v	78	0
29	0	79	0
30	0	80	0
31	1.496v	81	0
32	3.201v	82	0
33	2.175v	83	0
34	0.904v	84	0
35	3.202v	85	3.204v
36	0	86	3.203v
37	0	87	0
38	0	88	0
39	0	89	3.261v
40	0	90	3.266v
41	0	91	3.048v
42	0	92	1.639v
43	0	93	3.164v
44	0	94	3.130v
45	2.409v	95	3.166v
46	3.188v	96	0
47	0	97	3.264v
48	0.881v	98	3.260v
49	0	99	3.205v
50	0	100	0

IC 701			
PIN NO	VOLTAGE	PIN NO	VOLTAGE
1	-27.47	41	-27.39
2	-27.42	42	-29.62
3	-27.43	43	-27.39
4	27.44	44	-29.62
5	-27.43	45	-27.39
6	-25.32	46	-24.65
7	-27.42	47	-22.38
8	-27.43	48	-27.06
9	-27.43	49	-22.69
10	-27.42	50	-29.61
11	-27.43	51	-25.17
12	-27.46	52	-25.16
13	3.2	53	-25.18
14	0.9	54	-25.17
15	2.175	55	-25.16
16	1.496	56	-29.61
17	0	57	-25.15
18	0	58	-25.17
19	3.264	59	-27.4
20	1.468	60	3.266
21	1.493	61	-29.61
22	0	62	-29.61
23	-18.54	63	-29.61
24	-29.63	64	-27.41
25	-29.62		
26	-27.4		
27	-29.61		
28	-29.61		
29	-29.61		
30	29.61		
31	-27.28		
32	-29.81		
33	-27.64		
34	-29.62		
35	-29.16		
36	-29.05		
37	-24.26		
38	-29.3		
39	-27.37		
40	-29.3		

IC601	
PIN NO	VOLTAGE
1	0
2	0
3	0
4	4.96v
5	4.95v
6	4.92v
7	4.95v
8	4.96v
9	4.94v
10	4.95v
11	4.94v
12	4.94v
13	4.94v
14	4.94v
15	4.94v
16	4.97v
17	4.94v
18	4.94v
19	4.94v
20	4.94v
21	4.96v
22	4.96v
23	9.94v
24	3.221v

IC 901	
PIN NO	VOLTAGE
1	51.9v
2	23.32v
3	11.25v
4	11.29v
5	-23.31v
6	-51.8v
7	0
8	0
9	0
10	0
11	0
12	-50.4v
13	50.6v
14	0
15	0
16	-56.1v
17	0
18	0

IC 851	
PIN NO	VOLTAGE
1	5.06v
2	12.83v
3	19.6v
4	0
5	18.66v
6	9.95v
7	8.4v

IC 852	
PIN NO	VOLTAGE
1	19.56v
2	0
3	5.16v

IC S01	
PIN NO	VOLTAGE
1	2.566v
2	2.567v
3	2.543v
4	0
5	2.578v
6	2.604v
7	2.601v
8	12.67v

IC 854	
PIN NO	VOLTAGE
1	18.73v
2	0.696v
3	6.02v

A) IC 1 (CD Pre Amp)

No.	Voltage
1	3.2
2	1.6
3	1.6
4	1.6
5	1.6
6	0
7	2.6
8	0
9	1.6
10	1.6
11	1.6
12	1.1
13	2
14	1.6
15	1.6
16	1.6
17	0.7
18	1.6
19	1.2
20	1.5
21	2.3
22	0.8
23	1.6
24	0

B) IC 2 (Motor Driver)

No.	Voltage	No.	Voltage
1	3.1	25	1.6
2	3.1	26	0
3	3.1	27	7
4	3.1	28	7
5	3.1	29	7
6	3.2	30	0
7	0	31	0
8	4.4	32	0
9	7	33	0
10	3.2	34	0
11	1.6	35	3.1
12	1.6	36	3.1
13	1.6		
14	1.6		
15	1.6		
16	1.6		
17	1.6		
18	1.6		
19	3.1		
20	3.1		
21	2.4		
22	3.1		
23	3.1		
24	2.4		

C) IC 3 (CD DSP)

No.	Voltage	No.	Voltage
1	1.7	33	1.6
2	1.6	34	1.6
3	0	35	1.6
4	1.6	36	1.2
5	3.2	37	1.5
6	3.2	38	0
7	0	39	3.2
8	0	40	1.6
9	1.1	41	1.6
10	0	42	0
11	1.5	43	0
12	0	44	0
13	0	45	0
14	3.2	46	1.4
15	3.2	47	1.5
16	1.6	48	3.2
17	0	49	0
18	1.2	50	1.6
19	3.2	51	3.2
20	1.6	52	1.6
21	1	53	1.6
22	0	54	0
23	1.5	55	3.2
24	1.6	56	0
25	3.2	57	0
26	1.6	58	0
27	1.6	59	0
28	0.7	60	0
29	1.6	61	0
30	1	62	3.2
31	1.6	63	3.2
32	1.6	64	3.2

Q1

No.	Voltage
1	1.5
2	2.6
3	3.2

Q2

No.	Voltage
1	5
2	3.2
3	4.3

Q3

No.	Voltage
1	2
2	0
3	0

Q4

No.	Voltage
1	0
2	3.2
3	0

Q5

No.	Voltage
1	5
2	5
3	4.3

Q7

No.	Voltage
1	0
2	3
3	0

Q9

No.	Voltage
1	3.3
2	2.7
3	3.3

Q10

No.	Voltage
1	0
2	3.3
3	0

Q11

No.	Voltage
1	5.1
2	4.4
3	5.1

Q12

No.	Voltage
1	0
2	3
3	0

C) IC 4 (MP3 WMA Decoder)

No.	Voltage	No.	Voltage
1	1.5	33	3.3
2	3.2	34	0
3	0	35	0
4	0	36	0
5	0	37	0
6	3.2	38	0
7	0	39	0
8	3.3	40	1.5
9	3.3	41	0
10	0	42	3.3
11	0	43	0
12	1.8	44	0
13	1.7	45	0
14	0	46	0
15	1.7	47	0
16	1.6	48	0
17	2.4	49	0
18	3	50	0
19	2.4	51	0
20	1.7	52	0
21	1.5	53	0
22	0	54	0
23	0	55	1.5
24	0	56	0
25	0	57	1.5
26	0	58	0.7
27	0	59	0.7
28	0	60	0
29	0	61	0
30	0	62	3.3
31	0	63	0
32	3.3	64	0.7

E) IC 6 (USB Host mp3 Interface Controller)

No.	Voltage	No.	Voltage
1	1.4	33	3.1
2	1.5	34	1.8
3	3.3	35	1.6
4	0	36	1.5
5	0	37	1
6	3.3	38	3.1
7	2.4	39	3.2
8	0	40	0
9	3.3	41	1.6
10	1.6	42	1.3
11	1.6	43	3.3
12	2.2	44	3.3
13	1.6	45	3.3
14	0	46	0
15	3.3	47	1.6
16	1.3	48	1.7
17	1	49	3.2
18	1.1	50	1.5
19	0	51	1.2
20	0	52	0
21	0	53	0
22	0	54	0
23	0	55	3.3
24	3.3	56	2.9
25	1.8	57	0
26	0	58	0
27	1.2	59	2.9
28	0	60	3.3
29	3.3	61	0
30	1.4	62	2.7
31	1.5	63	1
32	3.3	64	1.4

D) IC 5 (DAC)

No.	Votage
1	1.5
2	1.8
3	0
4	1.7
5	5.1
6	5.1
7	5.1
8	5.1
9	0.4
10	2.5
11	2.5
12	2.5
13	0
14	5.1
15	0
16	0

G) IC 8 (CMOS 1.5v)

No.	Voltage
1	0
2	3.5
3	1.5

G) IC 9 (CMOS 3.3v)

No.	Voltage
1	0
2	5.1
3	3.3

F) IC 7 (USB Flash)

No.	Voltage
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	3.3
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
31	3.3
32	3.3

CHAPTER 6. CIRCUIT SCHEMATICS AND PARTS LAYOUT

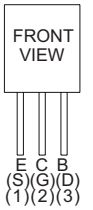
[1] Notes on schematic diagram

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage is used".
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type

- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     indicates AM
     indicates FM stereo
  2. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ “ (⊏ ═ ═ ═ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

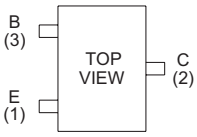
REF. NO	DESCRIPTION	POSITION
SW701	DISC4	ON—OFF
SW702	DISC5	ON—OFF
SW703	OPEN/CLOSE	ON—OFF
SW704	DISC1	ON—OFF
SW705	DISC2	ON—OFF
SW706	DISC3	ON—OFF
SW707	POWER ON/STAND-BY	ON—OFF
SW708	PLAY/PAUSE	ON—OFF
SW709	STOP	ON—OFF
SW710	VIDEO/AUX/USB	ON—OFF
SW711	TUNER (BAND)	ON—OFF
SW712	CD	ON—OFF
VR701	VOLUME	MAX —MIN

[2] Types of Transistor and LED

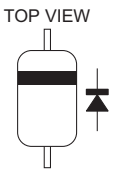


KTA1266 GR
KTA1271 Y
KTA1273 Y
KTA1274 Y
KIA78L05X

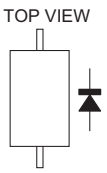
KTC3194 Y
KTC3199 GR
KTC3200 GR
KTC3203 Y
KTC3205 Y



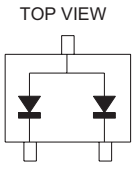
KRA107 S
KRC102 S
KRC104 S
KTA1504 Y
KTC3875 GR



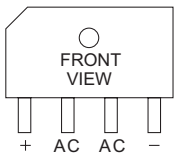
DS1SS119



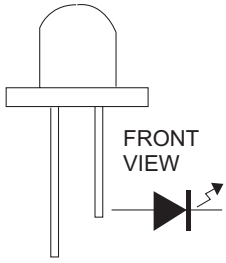
1N404S
1N4148H



KDS184
KDS160

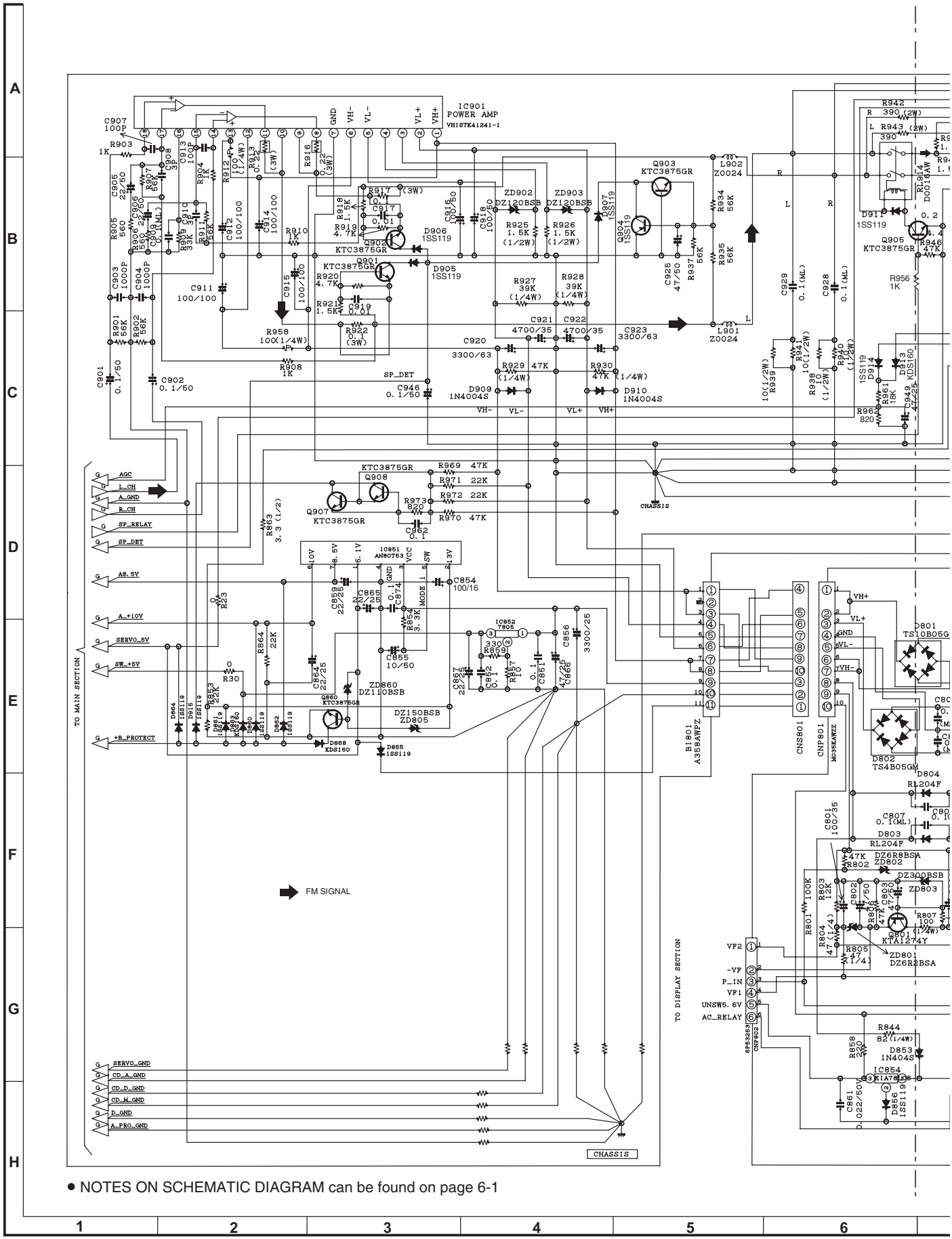


TS10B05G
TS4B05G



343VC3F
SDPB50CD
SDPB40F2A

KIA7805A



- NOTES ON SCHEMATIC DIAGRAM can be found on page 6-1

Figure 6-1: POWER SCHEMATIC (1/8)

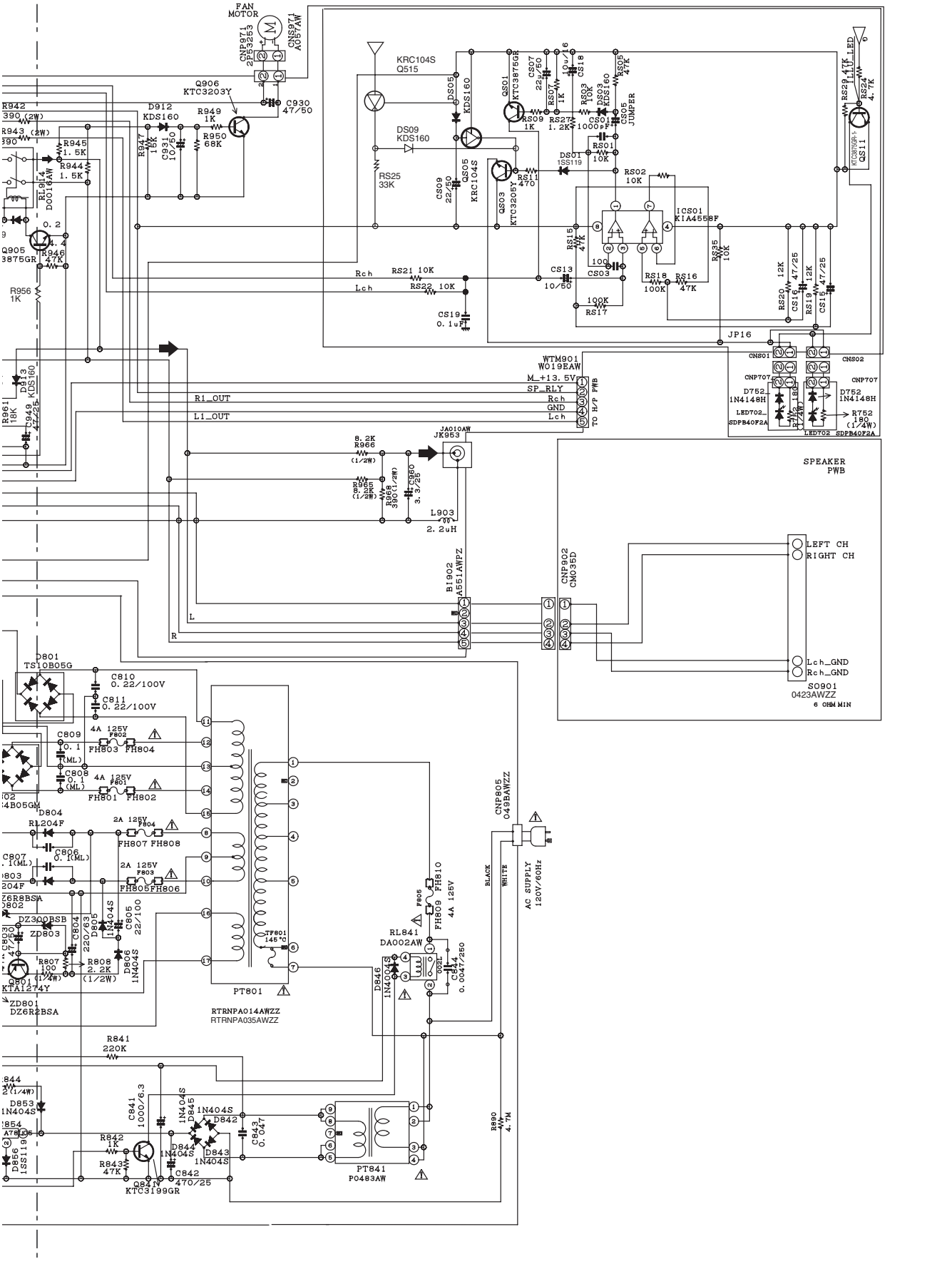


Figure 6-2: POWER SCHEMATIC (2/8)

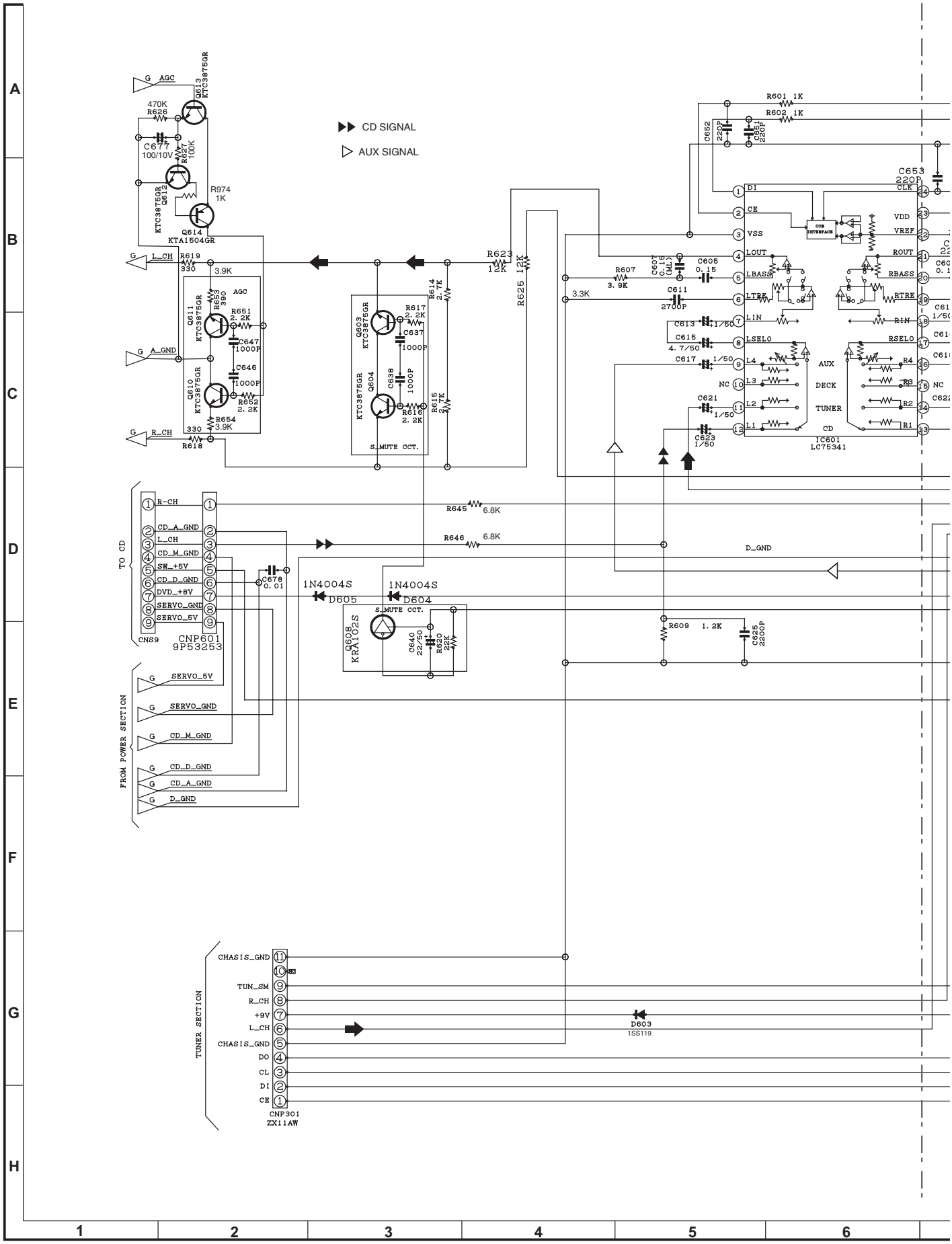
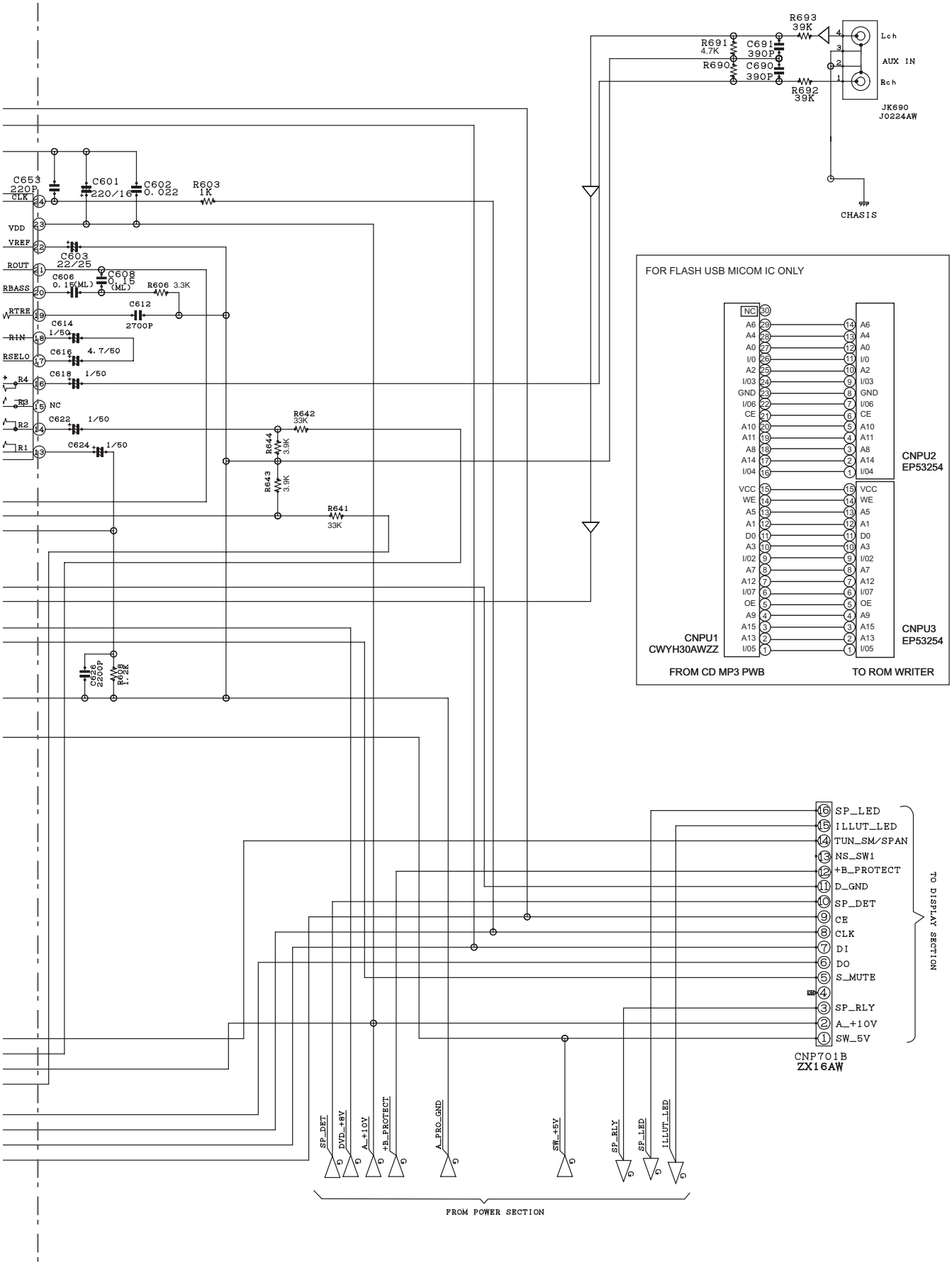


Figure 6-3: MAIN SCHEMATIC (3/8)



7	8	9	10	11	12

Figure 6-4: MAIN SCHEMATIC (4/8)

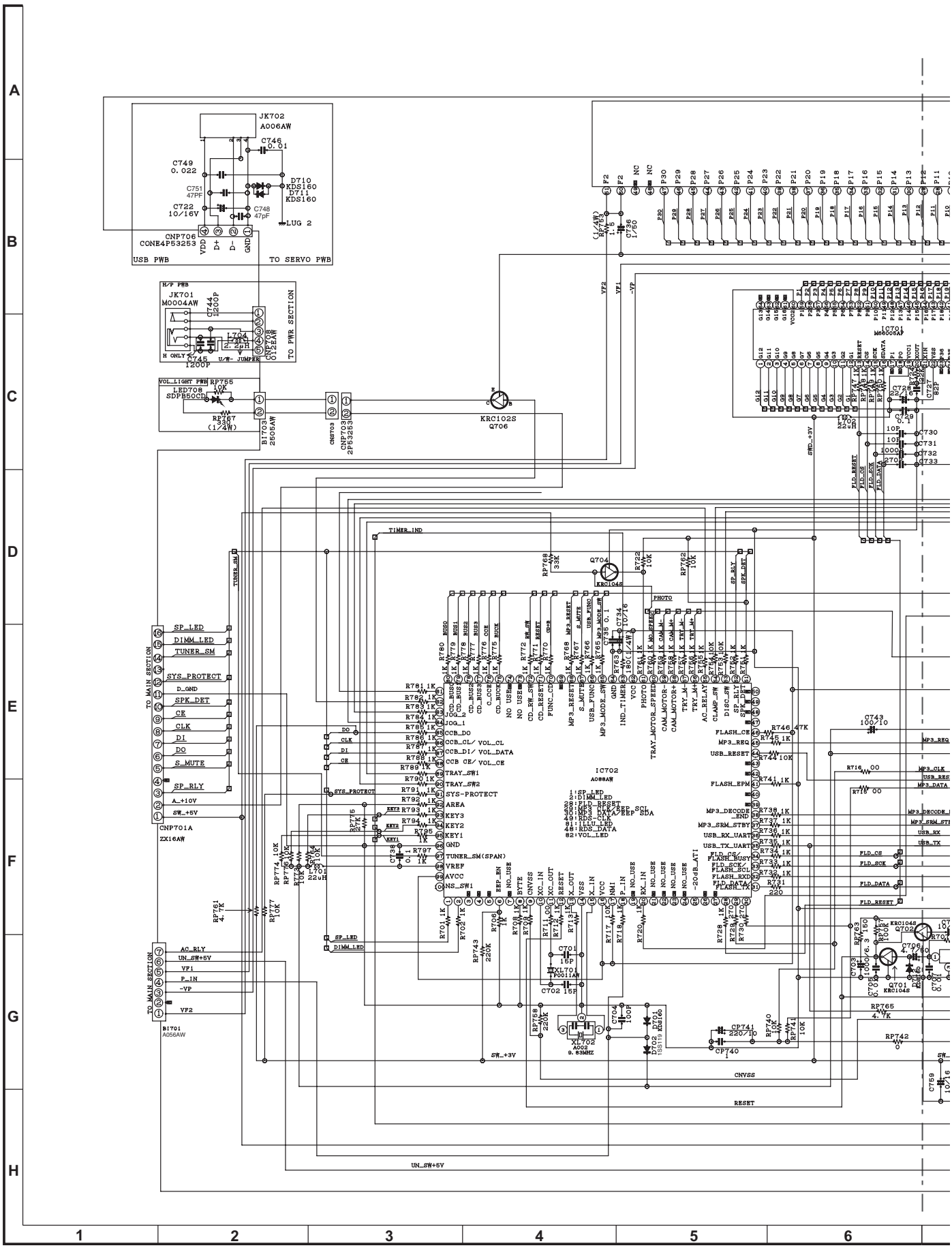
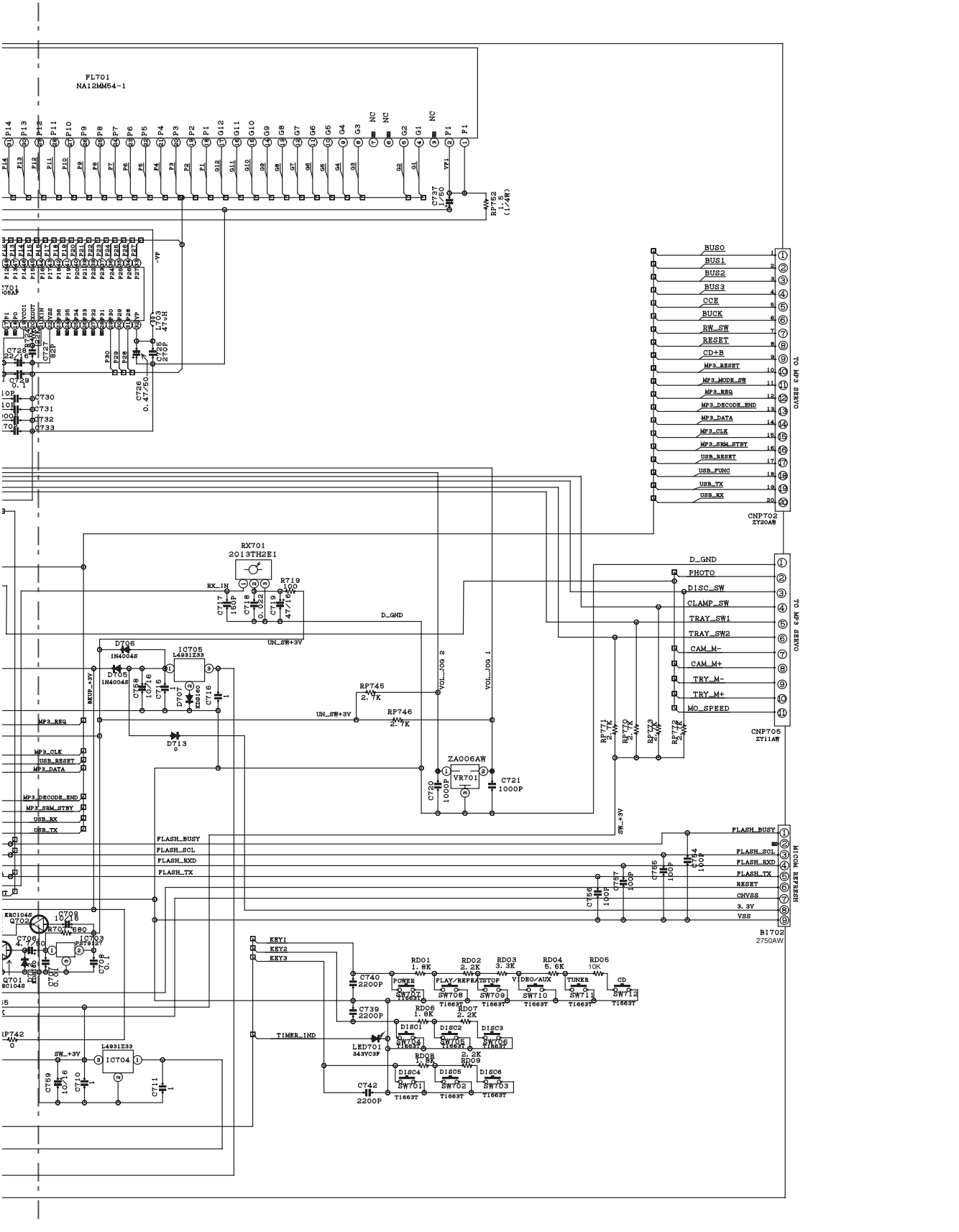


Figure 6-5: DISPLAY SCHEMATIC (5/8)



7	8	9	10	11	12

Figure 6-6: DISPLAY SCHEMATIC (6/8)

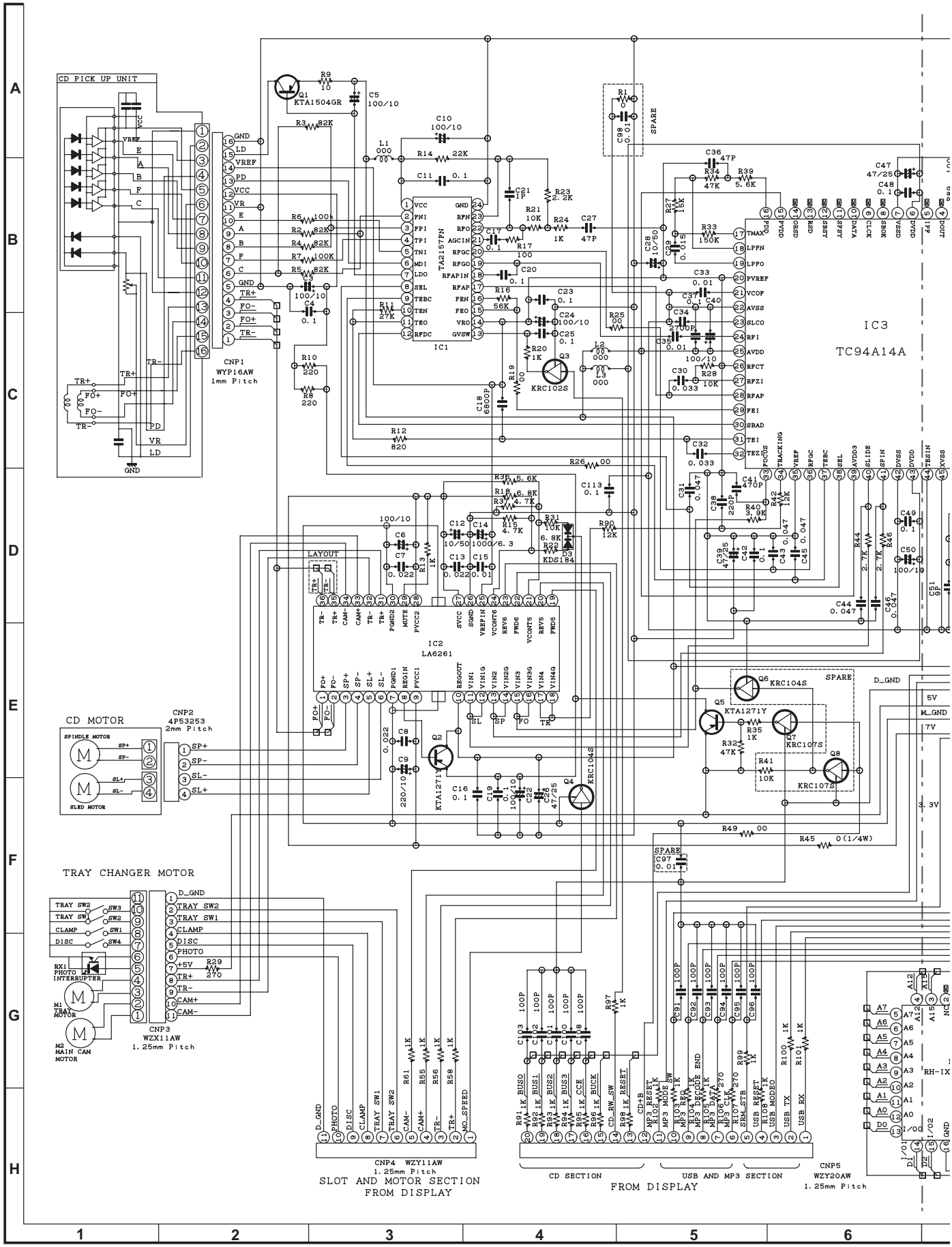
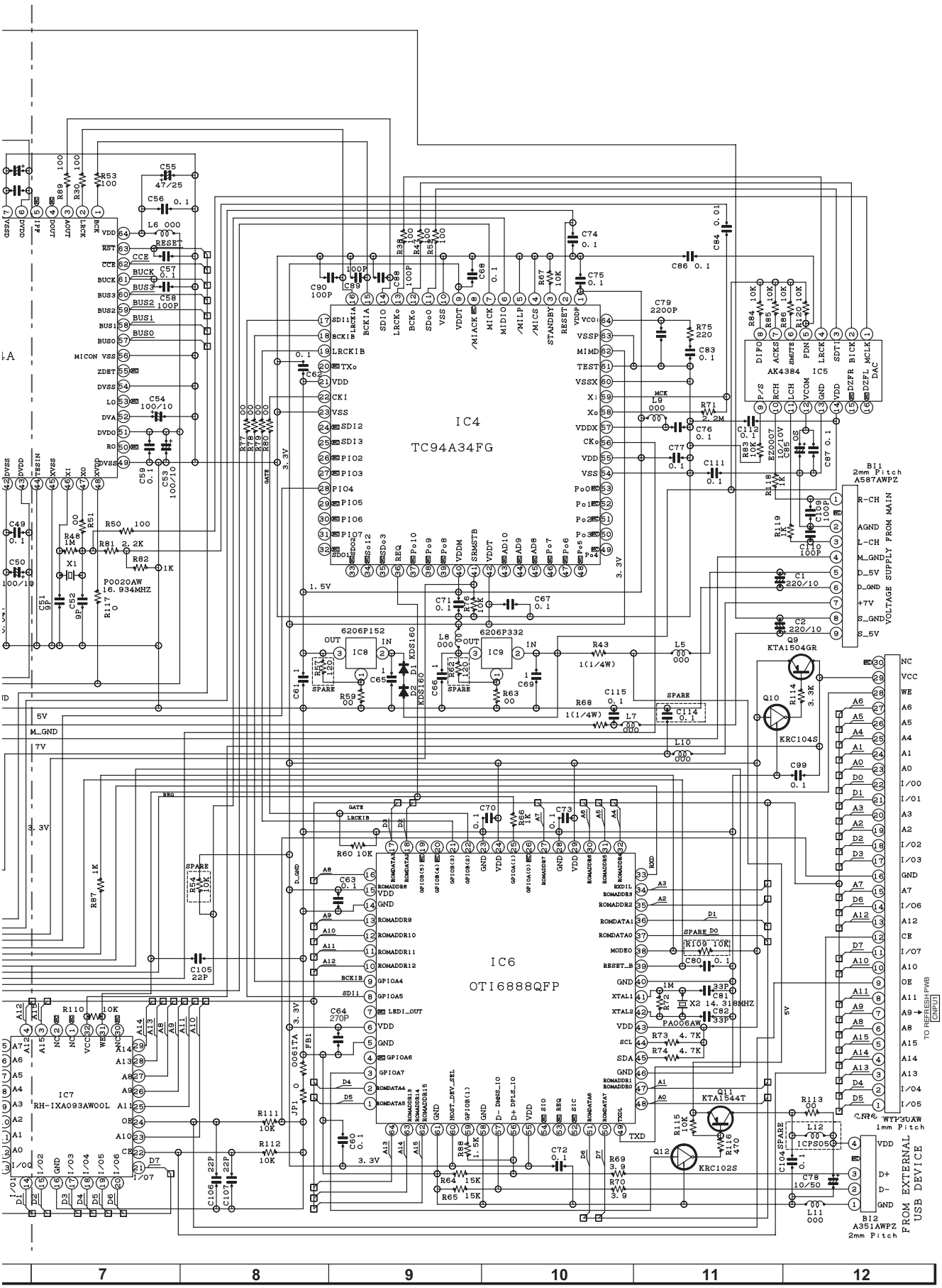


Figure 6-7: CD MP3 SCHEMATIC (7/8)



7	8	9	10	11	12

Figure 6-8: CD MP3 SCHEMATIC (8/8)

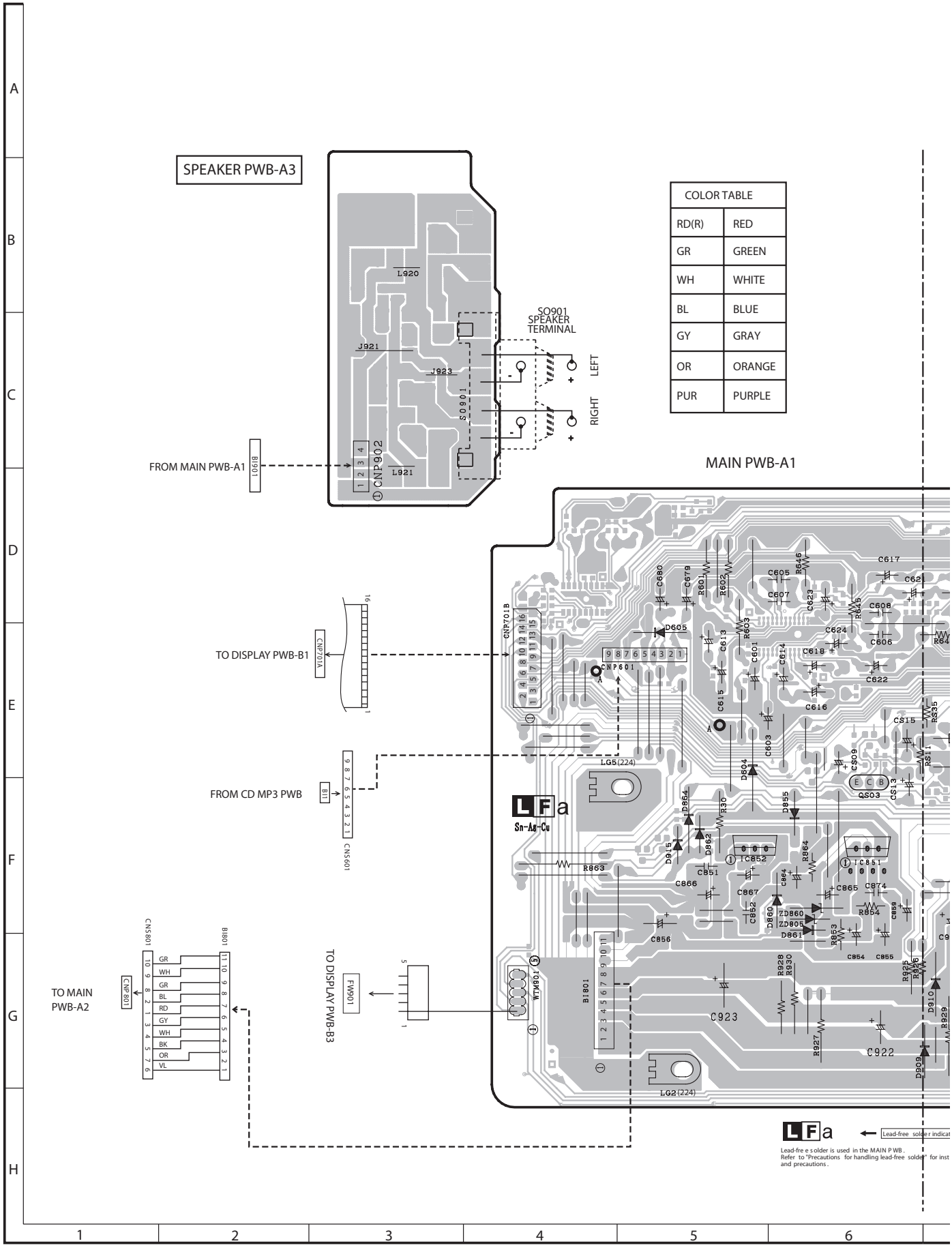
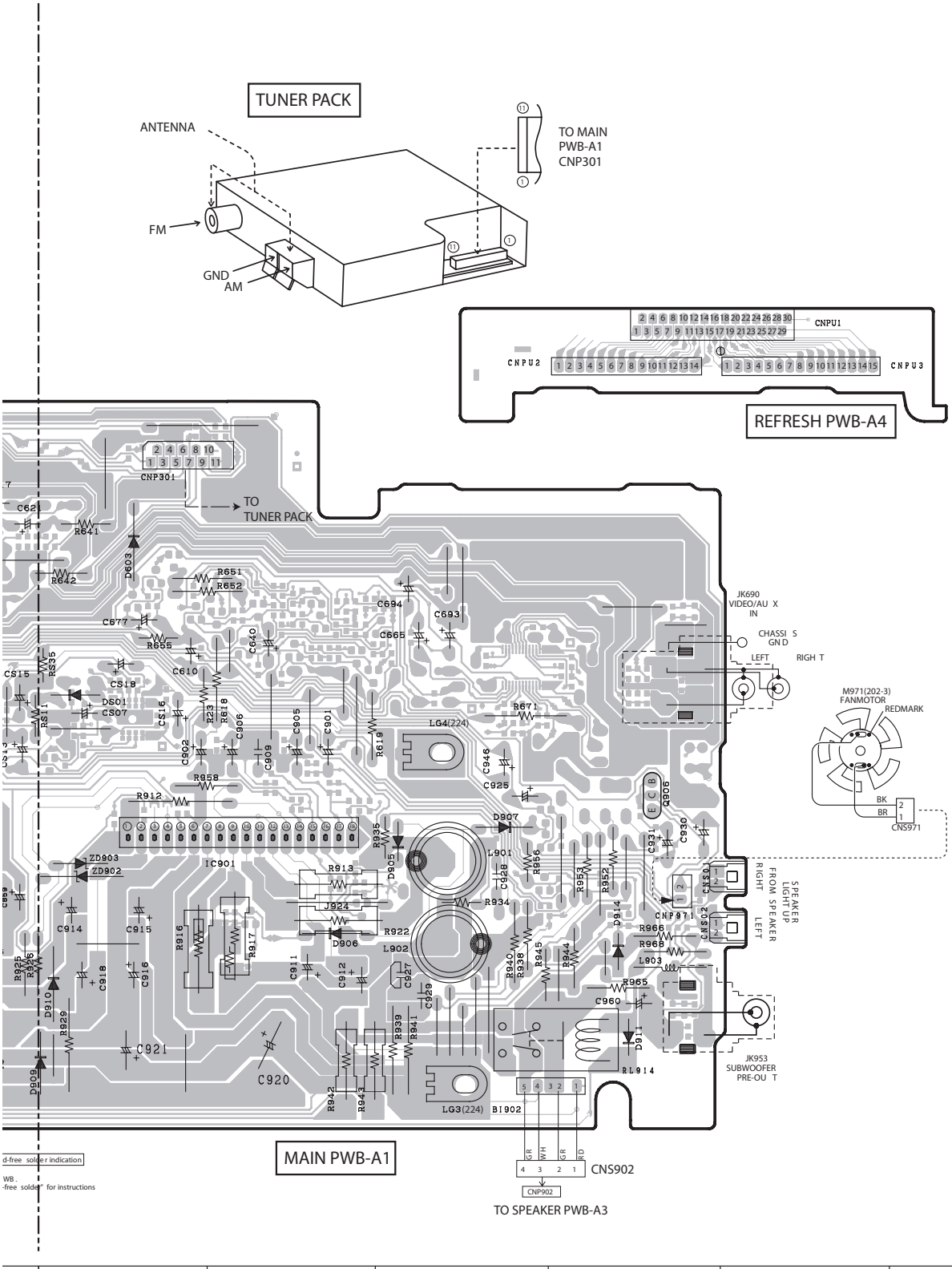


Figure 6-9: WIRING SIDE OF MAIN PWB (TOP VIEW) (1/2)



	7	8	9	10	11	12

Figure 6-10: WIRING SIDE OF MAIN PWB (TOP VIEW) (2/2)

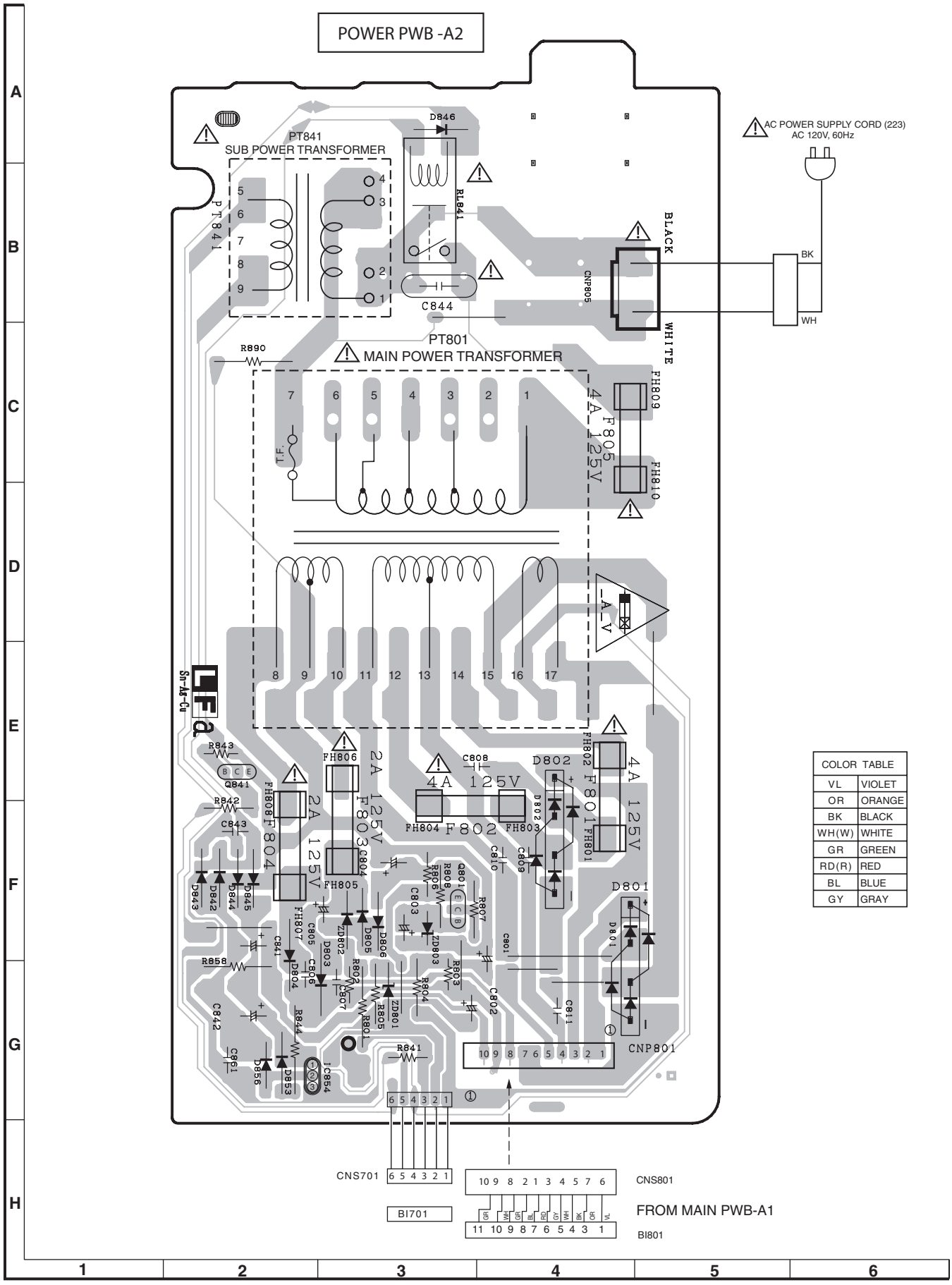


Figure 6-11: POWER PWB WIRING SIDE TOP VIEW

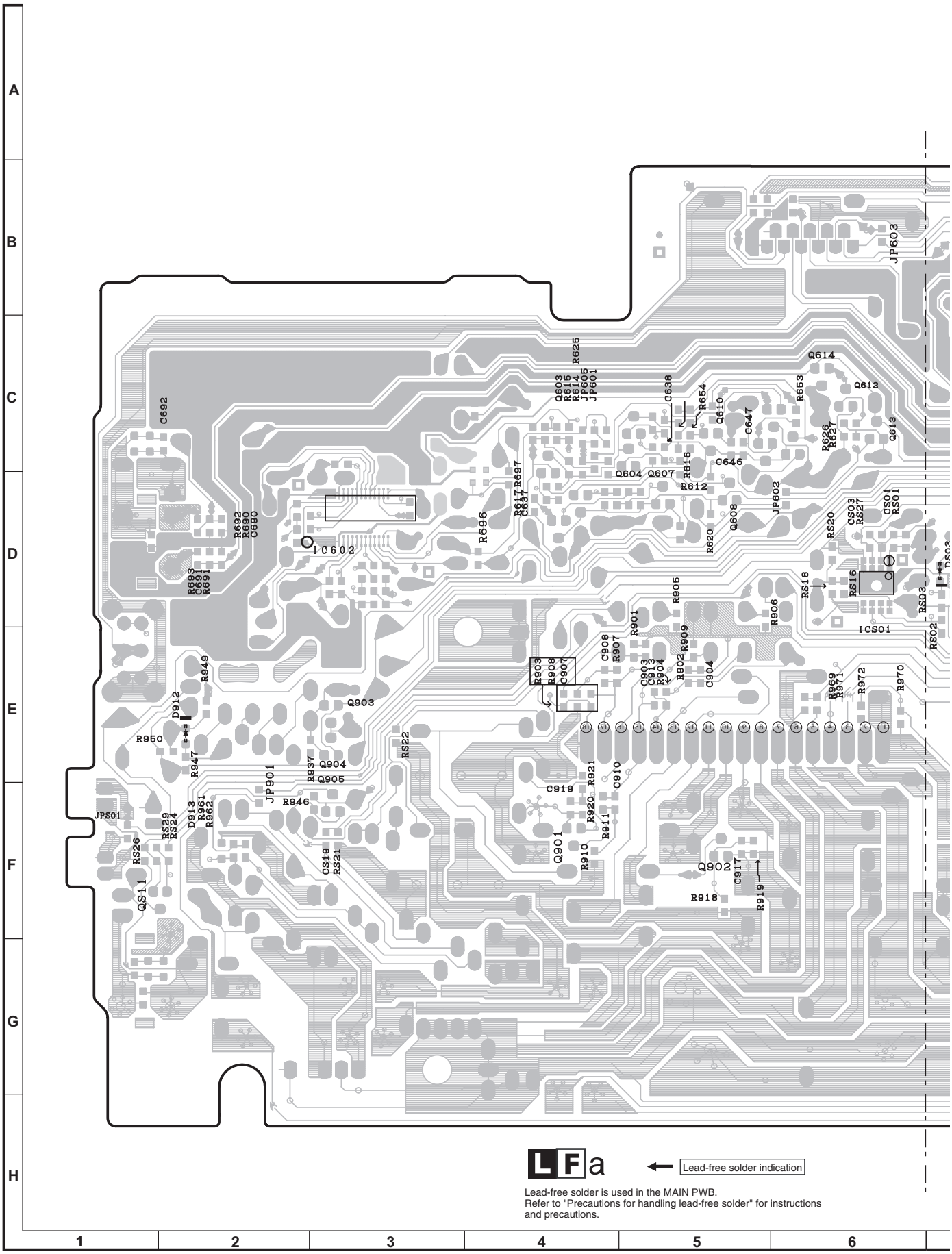


Figure 6-12: WIRING SIDE OF MAIN PWB (BOTTOM VIEW) (1/2)

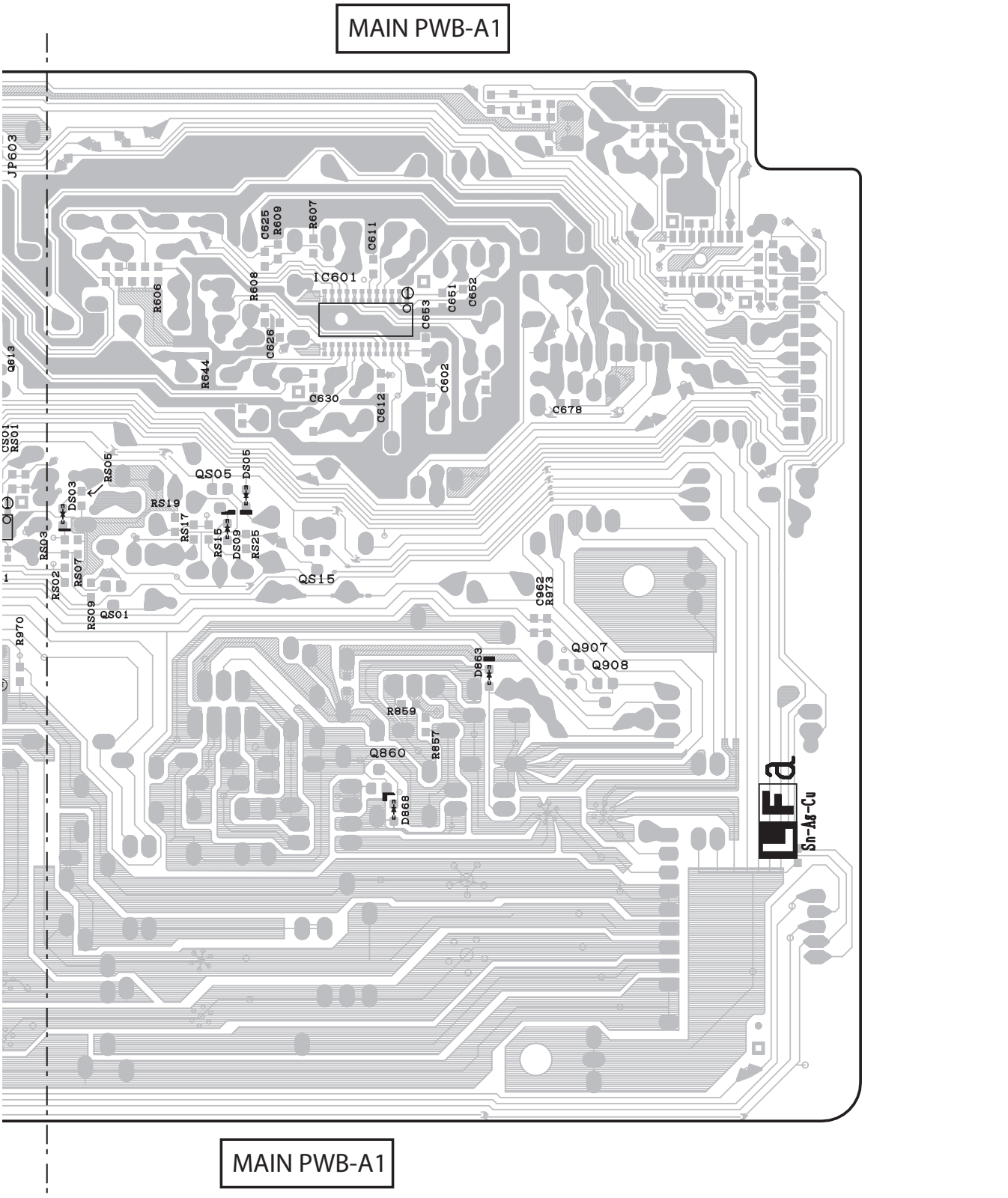


Figure 6-13: WIRING SIDE OF MAIN PWB (BOTTOM VIEW) (2/2)

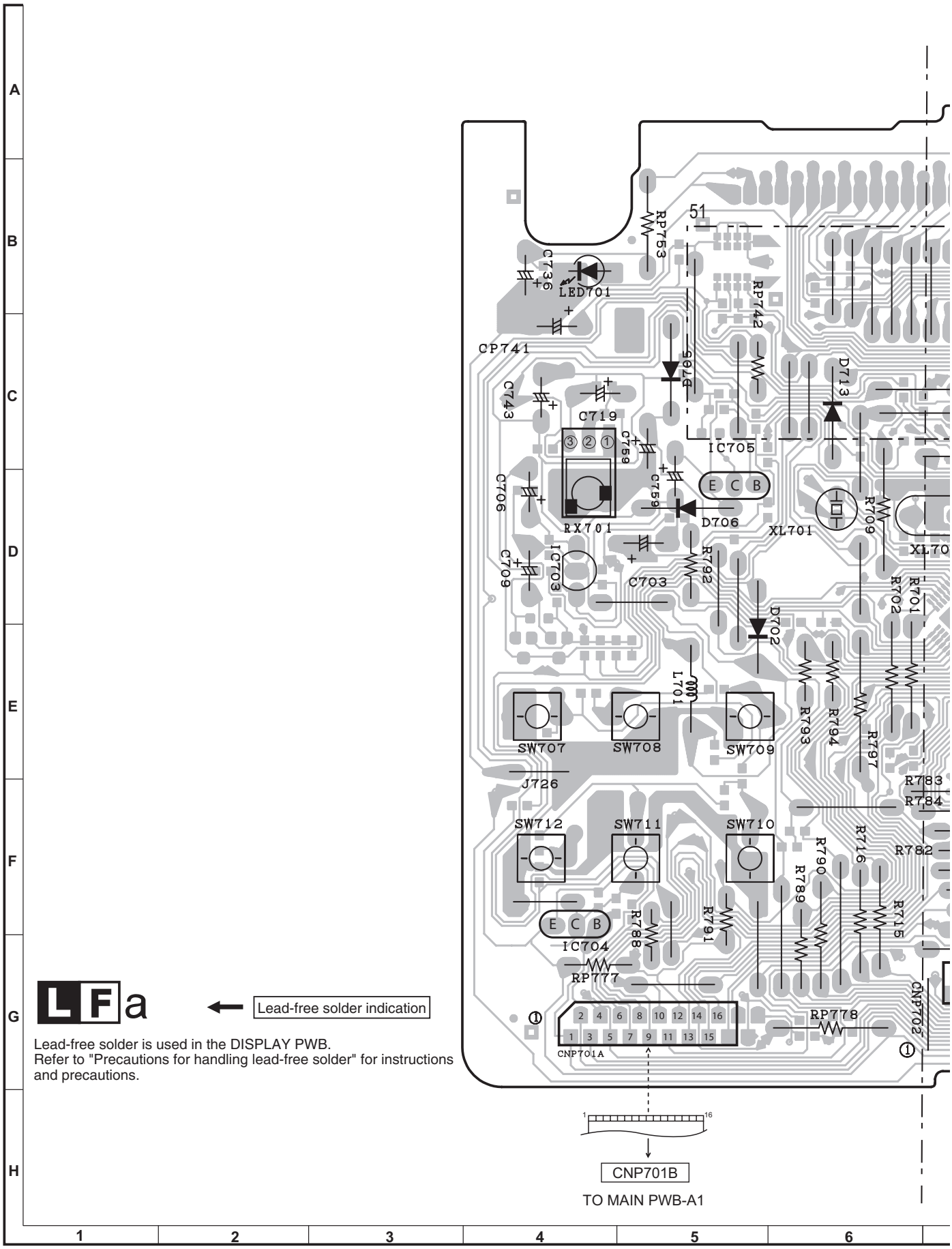


Figure 6-14: WIRING SIDE OF DISPLAY PWB (TOP VIEW) (1/3)

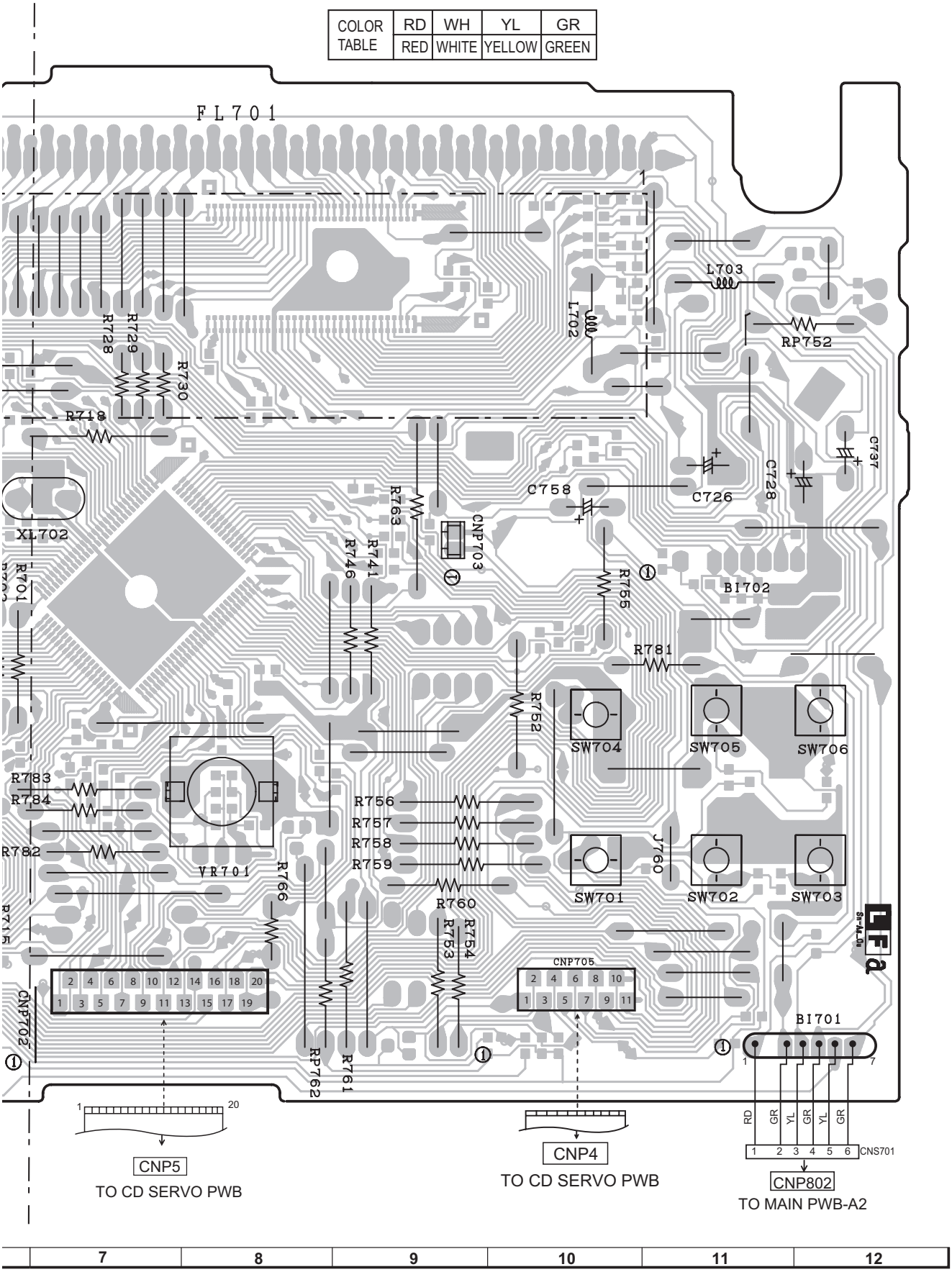


Figure 6-15: WIRING SIDE OF DISPLAY PWB (TOP VIEW) (2/3)

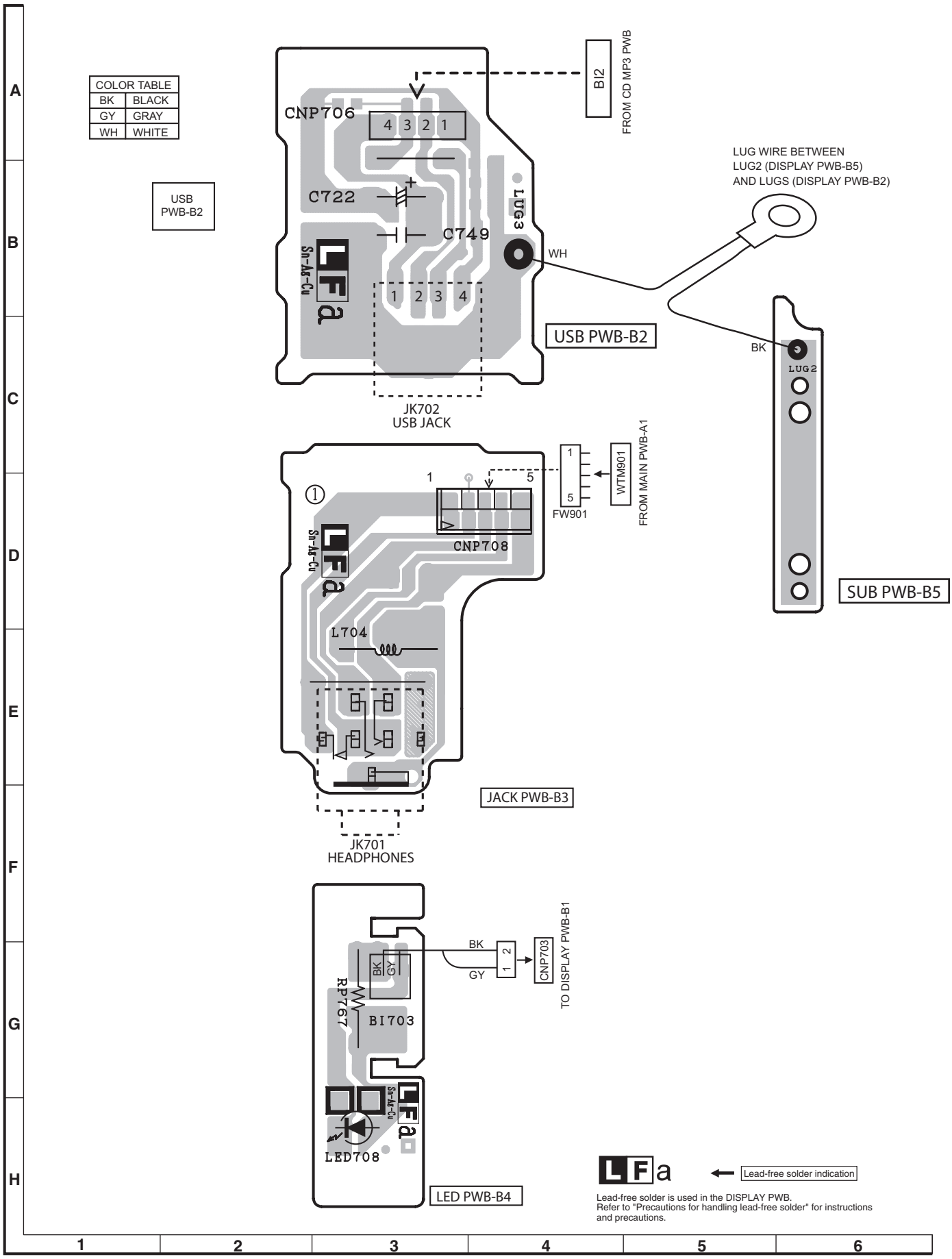


Figure 6-16: WIRING SIDE OF DISPLAY PWB (TOP VIEW) (3/3)

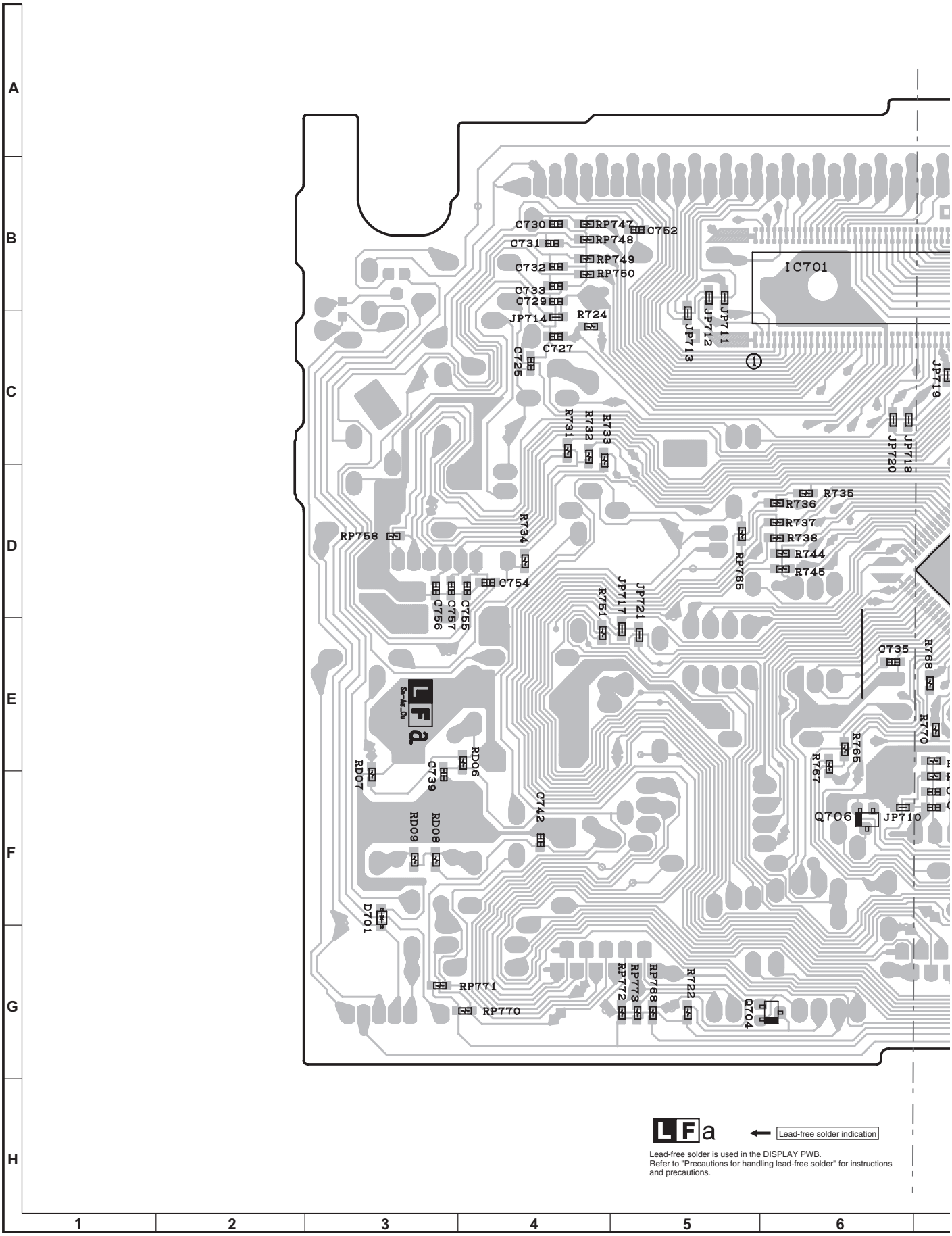
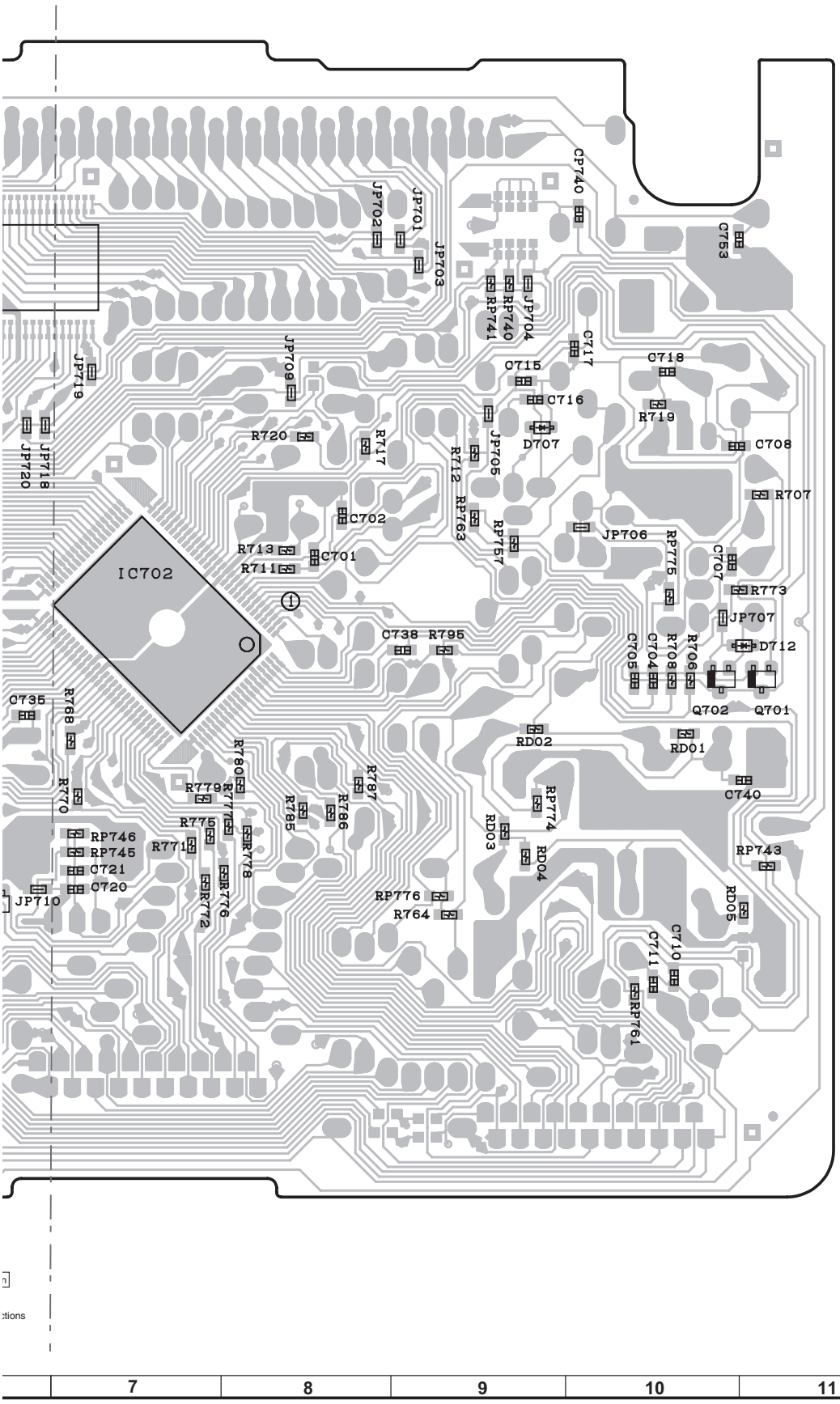


Figure 6-17: WIRING SIDE OF DISPLAY PWB (BOTTOM VIEW) (1/3)



7	8	9	10	11	12

Figure 6-18: WIRING SIDE OF DISPLAY PWB (BOTTOM VIEW) (2/3)

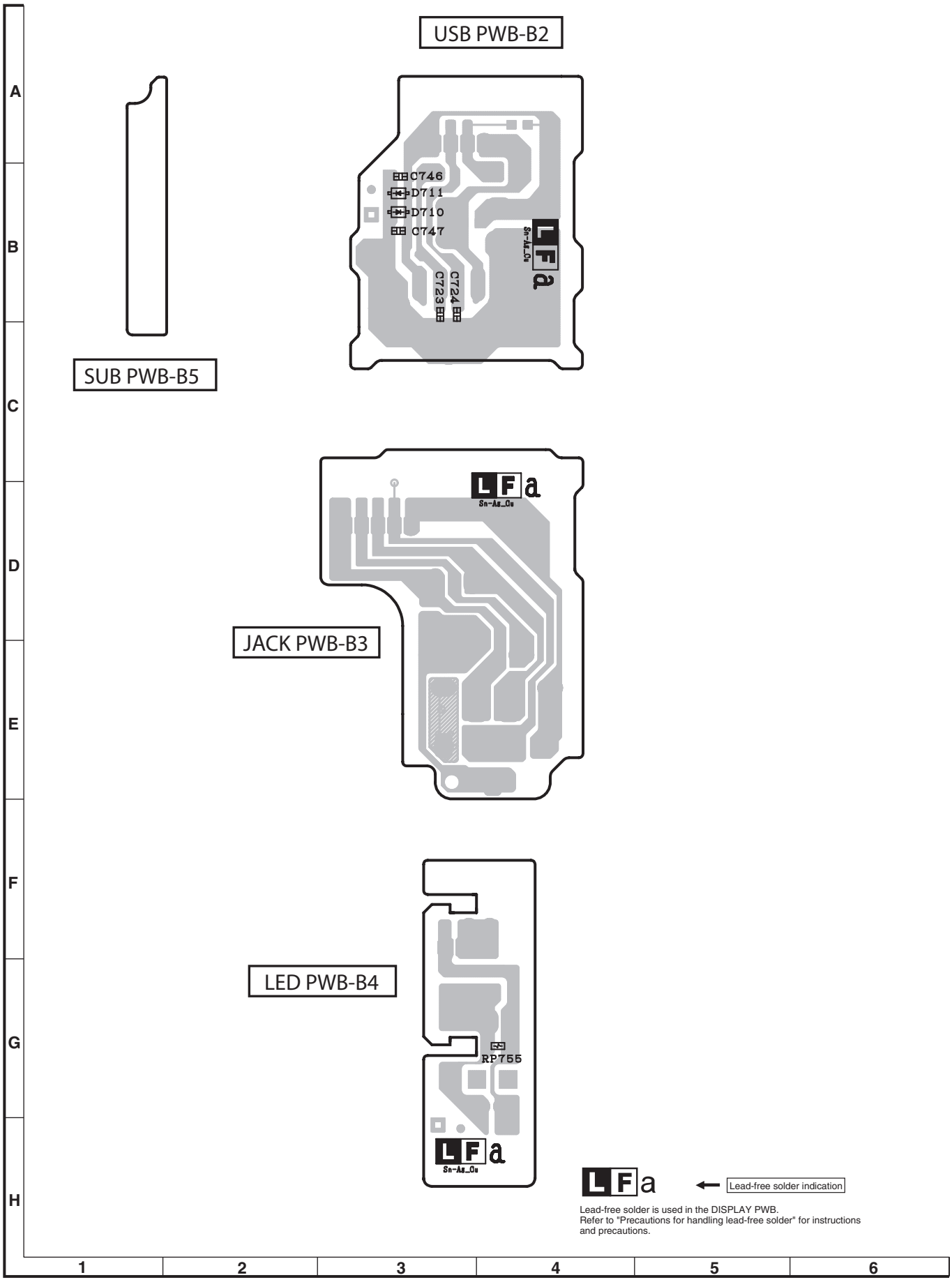


Figure 6-19: WIRING SIDE OF DISPLAY PWB (BOTTOM VIEW) (3/3)

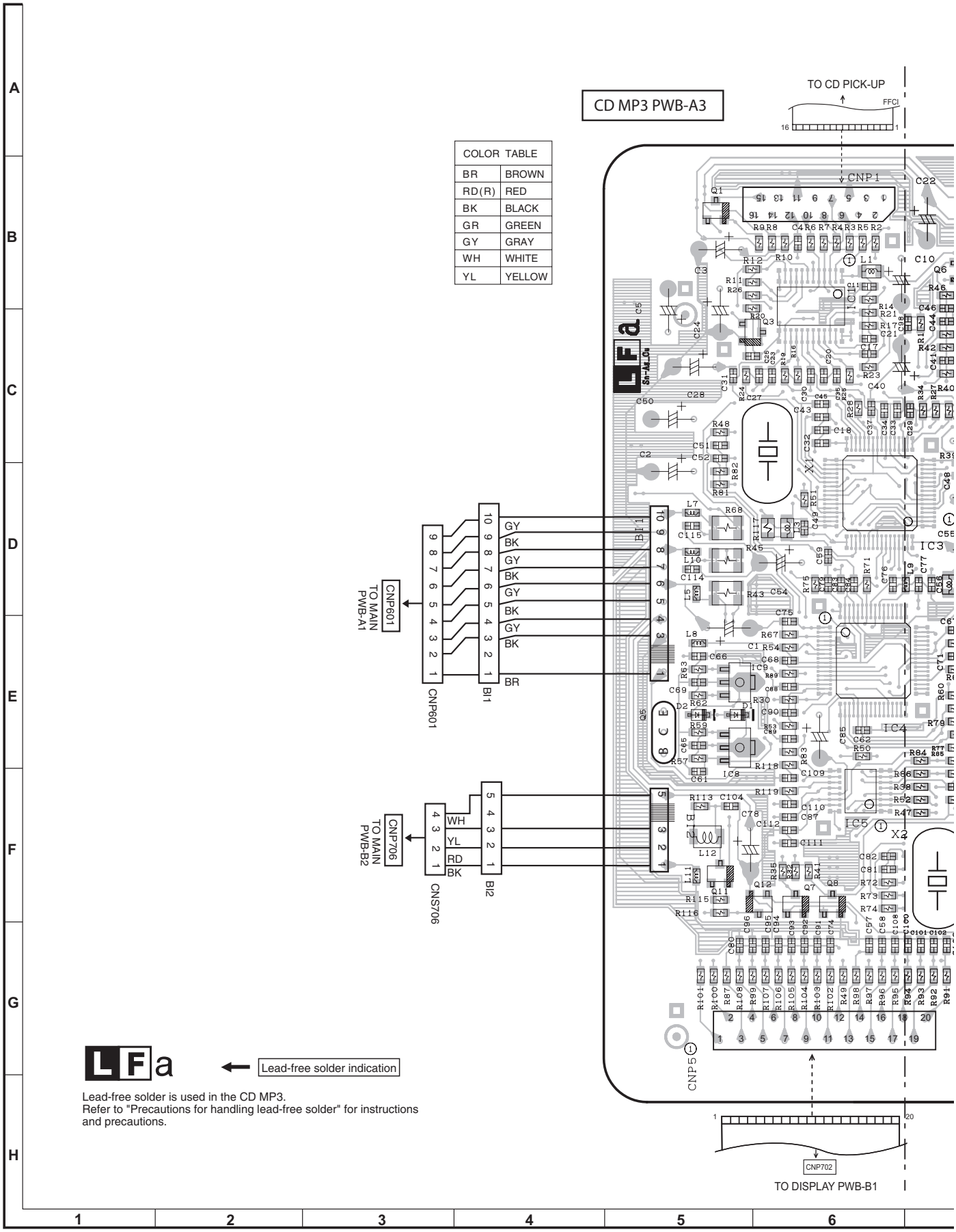


Figure 6-20: WIRING SIDE OF CD MP3 PWB (1/2)

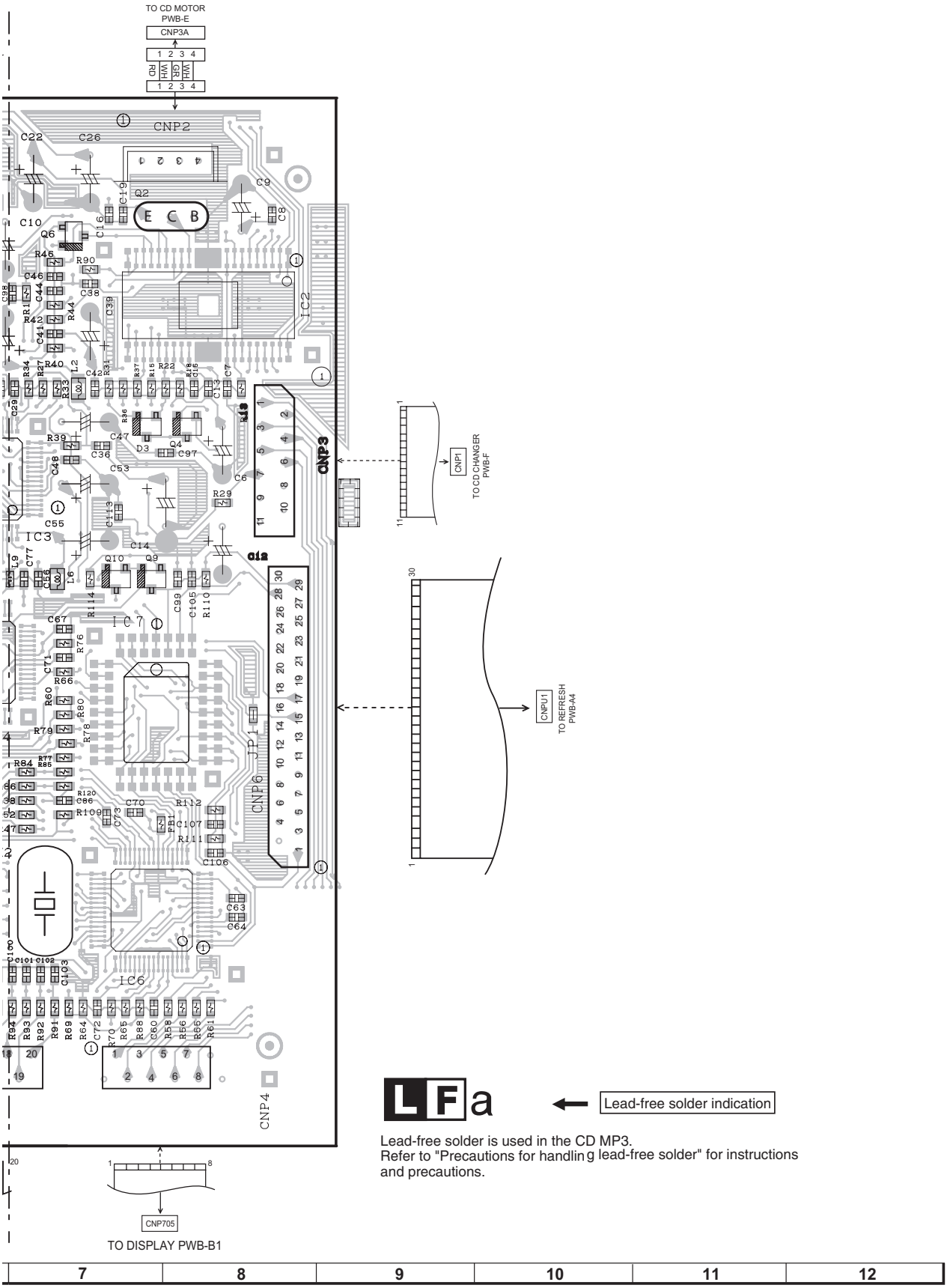


Figure 6-21: WIRING SIDE OF CD MP3 PWB (2/2)

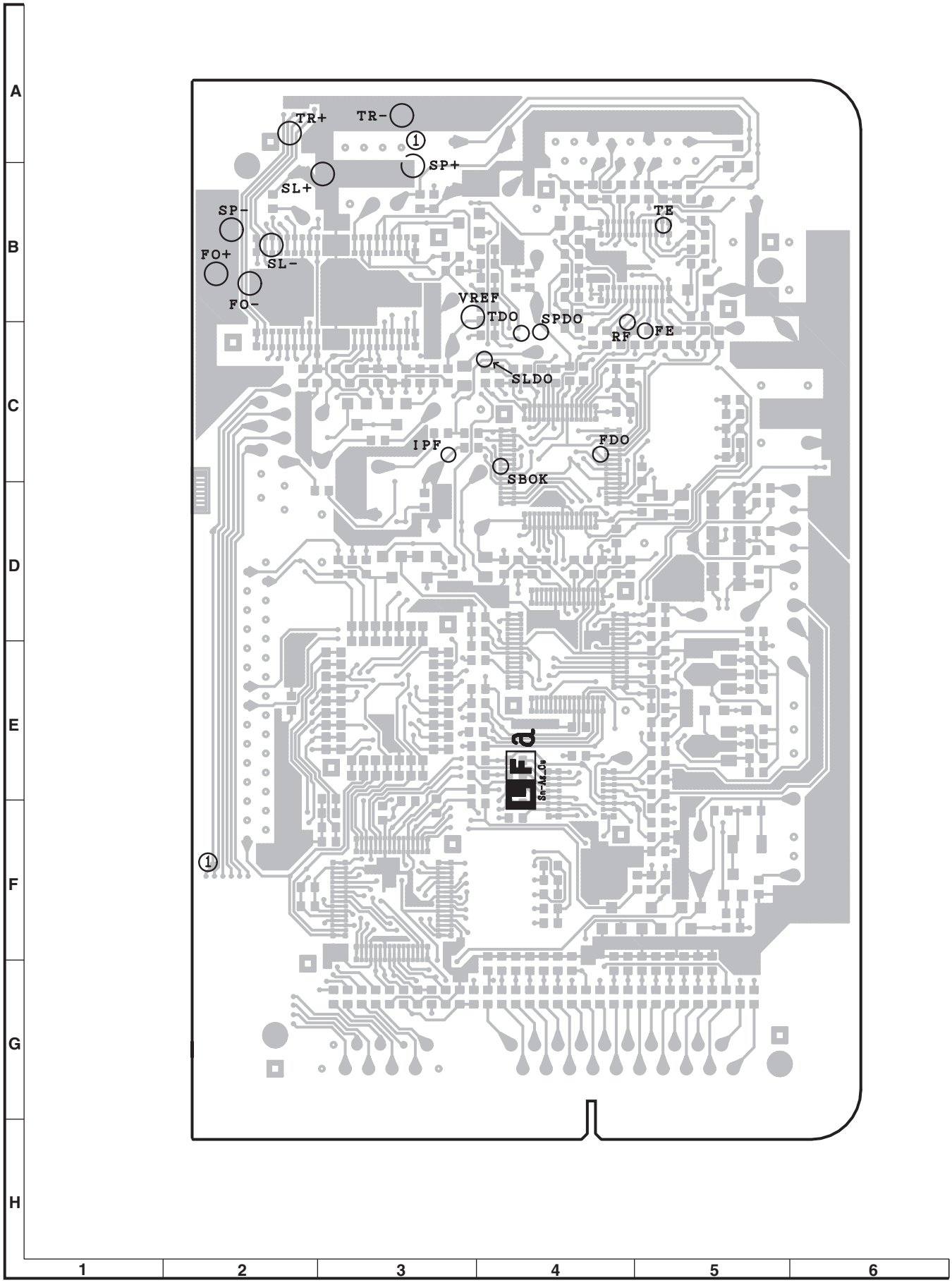


Figure 6-22: CD SERVO PWB BOTTOM VIEW

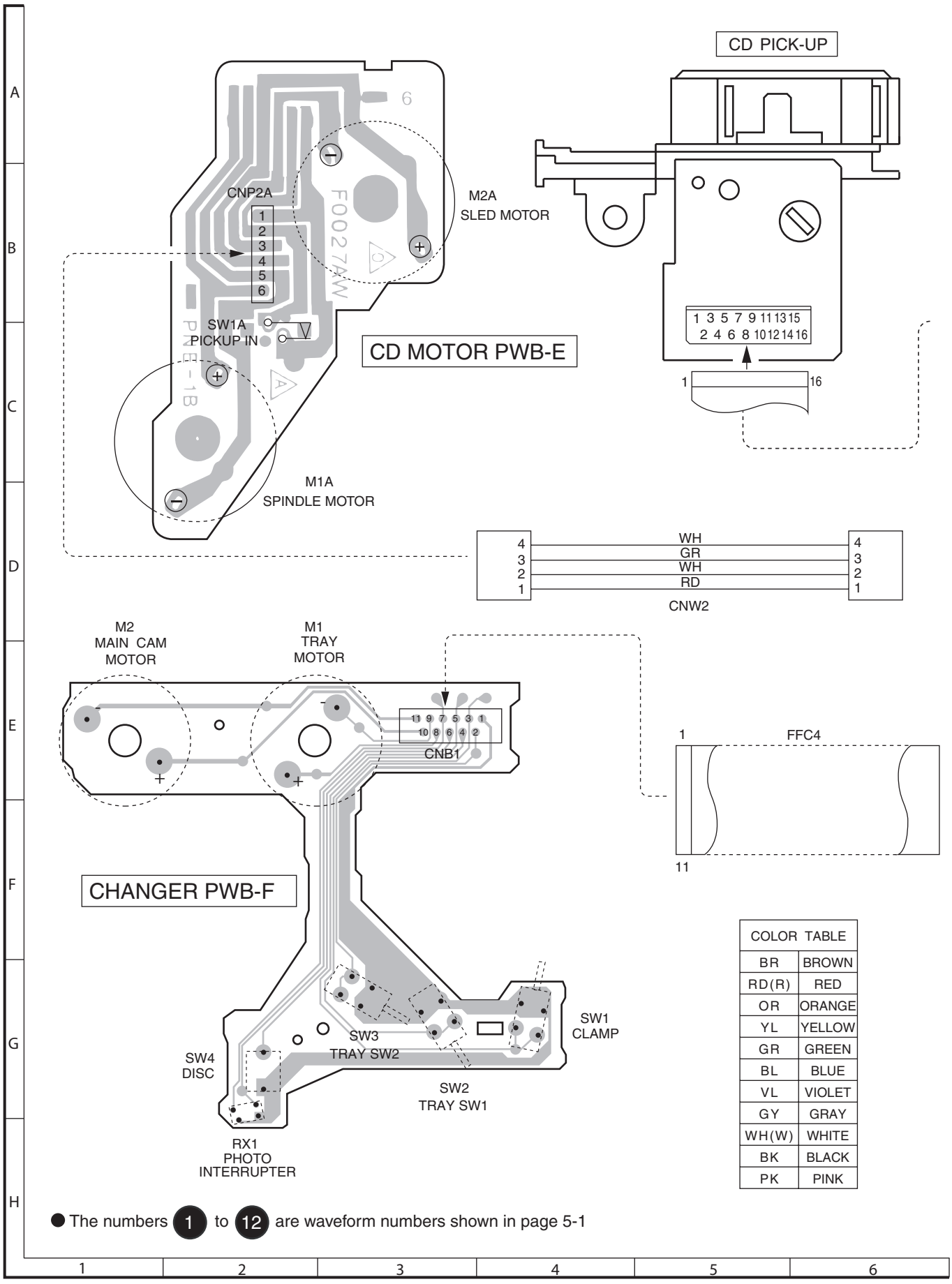


Figure 6-23: WIRING SIDE OF P.W.BOARD (11/11)

CHAPTER 7. FLOWCHART

[1] TROUBLESHOOTING

1. When the CD does not function

The CD section may not operate when the objective lens of the optical pickup is dirty. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.

Remove the cabinet and follow the trouble shooting instructions.

"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

Turn the power off.

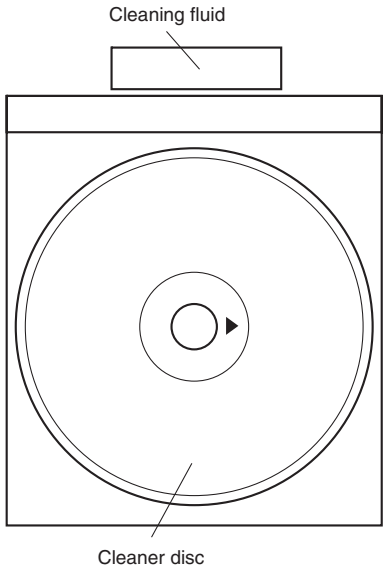
Gently clean the lens with a lens cleaning tissue and a small amount of isopropyl alcohol.

Do not touch the lens with the bare hand.

		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down,then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it still play continuously, press the stop button.



CAUTION

- The CD lens cleaner should be effective for 30-50 operations, however if the brushes become worn out earlier then please replace the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disc must not be used on car CD players or on computer CD-ROM drives.
- All rights reserved. Unauthorized duplicating, broadcasting and renting this product is prohibited by law.

2. When a CD cannot be played

2.1. Pressing the CD operation key is accepted, but playback does not occur.

1) Focus-RF system check
2) Tracking system check
3) Spin system check
4) PLL system check
5) Others

3. When the USB does not function.

3.1. “NO MEDIA” is displayed.

1) Check the power to IC6 (OTI6888QFP), IC7 (RH-IXA093AW00) and BI2 connector.
2) Check the system microcomputer (especially the communication line with the USB Host).
3) Check the grounding condition to IC6 (OTI6888QFP), IC7 (RH-IXA093AW00) and BI2 connector.

4. When a USB cannot be played.

4.1. Pressing the USB operation key is accepted, but playback data does not occur.

1) D+ data line.
2) D- data line.
3) Others.

(1) Focus-RF system check.

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

Press the Tray1 CD Eject Button without inserting a disc, and try starting the playback operation.

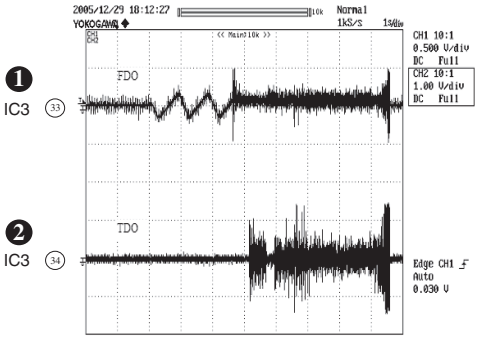


Figure 1

1. Does the pickup move?
   - No → Sled motor (M2A).
   - Yes ↓
2. Does the focus (lens) move up and down ? (Waveform drawing Figure 1)
   - No → Check the focus peripheral circuit.
   - Yes ↓
3. Is the laser lit ?
   - No → Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
4. Is the turntable rotating ?
   - No → Spindle motor (M1A).
   - Yes ↓

When a disc is loaded, start playback operation.

1. Is focus servo activated ? (Waveform drawing Figure 2)
   - No → Pins 2, 3, 15 and 16 on IC1, Pins 1, 2, 15 and 16 on IC2 and pins 29 and 33 on IC3. Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
2. Is the RF waveform normal ? (Waveform drawing Figure 3)
   - No → If the level is not normal.

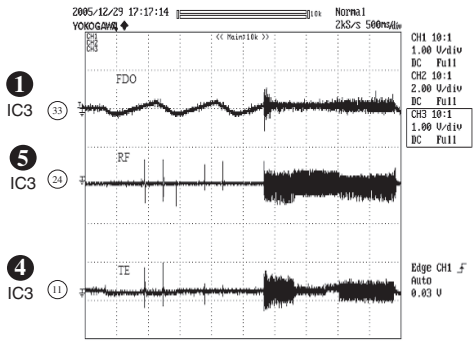


Figure 2

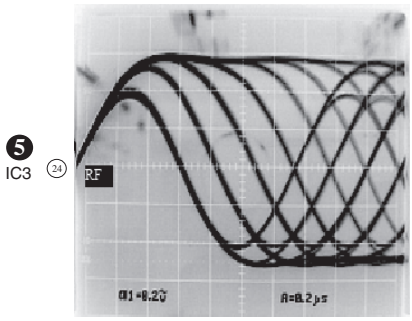


Figure 3

(2) Focus-RF system check.

Check the TE waveform at pin 31 on IC3.

If the waveform shown in Figure 4 appears and soon after NO DISC appears ?

→ Yes: The tracking servo is not activated.
Check the peripheral circuits at pins 32, 31 and 34 on IC3, pins 4, 5, 10 and 11 on IC1, pins 17, 18, 35 and 36 on IC2 and FFC1.

↓ No

"Initialization" is possible, but play is not possible ?

→ Yes: A normal jump operation cannot be completed or the beginning of the track cannot be found.
Check the around pin 34 on IC1.

↓ No

"Initialization" is not possible.

→ Data cannot be read. Check the VCO-PLL (Pins 16~19 and 21 on IC3) system.

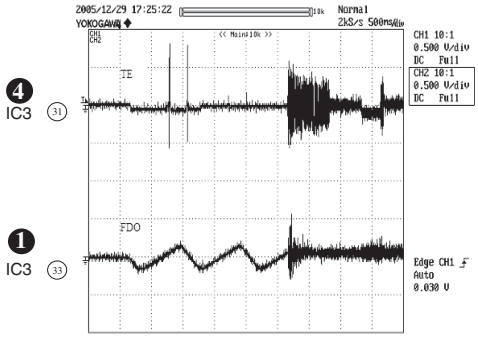


Figure 4

(3) Spin system check.

Press the OPEN/CLOSE switch without inserting a disc, and then try starting the play operation.

1. The turntable rotates a little ?
(Waveform drawing Figure 5)

→ Yes: The spin driver circuit is OK.

↓ No

2. The turntable doesn't rotate.

→ Check around pin 41 on IC3, pins 3, 4, 13 and 14 on IC2.

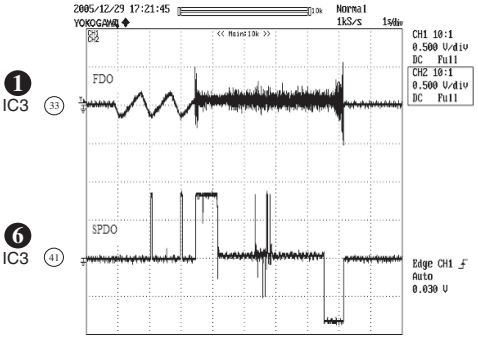


Figure 5

(4) PLL system check.

When a disc is loaded, start play operation.

↓

The RF waveform is normal, but the TOC data cannot be read.

↓

Check the IMAX waveform. (Figure 6)

↓

Check around Pins 16~19, and 21 on IC3.

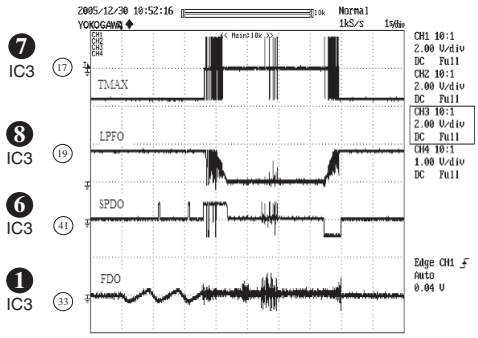


Figure 6

(5) Others.

The RF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has drop-outs.

Is pin 11, 12 and 13 on IC5. (Figure 7)

No → There are too many error flags on a damaged disc which makes error correction impossible.

↓

Check again using a known good disc.

↓ Yes

If OK, Check the unit.

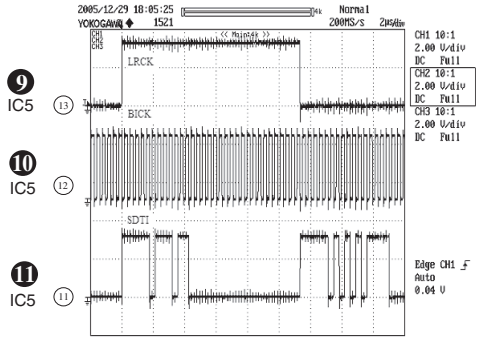


Figure 7

(6) USB system check.

Press USB funnction, insert the USB memory device into the USB.

1. Does the device information can display?

No → Check around pin 56 and 57 or 34, 38, 39 and 49 on IC6. (Figure 8 & 9)

Yes ↓

2. The waveform and the time is displayed normal, but no sound is produced.

No → Check around pin 8, 9 and 21 on IC6. (Figure 10)
pin 11~13 on IC5. (Figure 7)

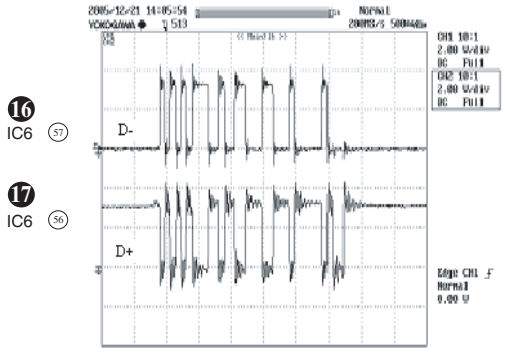


Figure 8

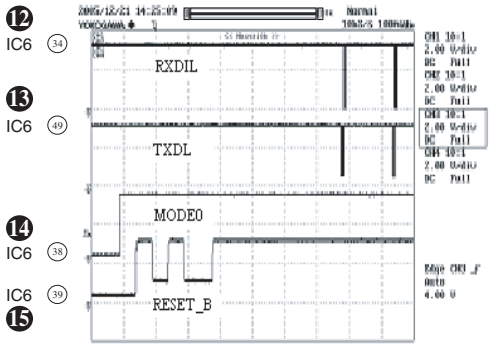


Figure 9

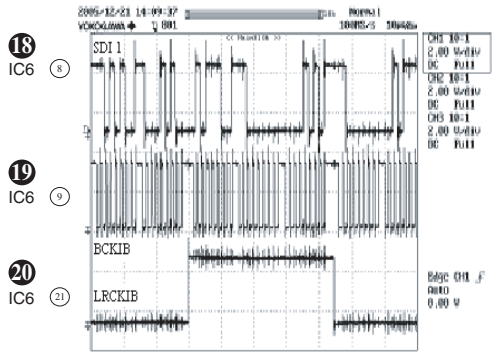


Figure 10

CHAPTER 8. OTHER

[1] FUNCTION TABLE OF IC

IC2 VHILA6261//-1: Focus/Tracking/Spin/Sled Driver (LA6261)

Pin No.	Terminal Name	Function
1	FO+	BTL Output pin (+) for focus coil.
2	FO-	BTL Output pin (-) for focus coil.
3	SP+	BTL Output pin (+) for spin motor.
4	SP-	BTL Output pin (-) for spin motor.
5	SL-	BTL Output pin (+) for slide motor.
6	SL+	BTL Output pin (-) for slide motor.
7	PGND1	Power GND for channels 1,2,3 and 4 (BTL).
8	REGIN	Regulator pin (External PNP base).
9	PVCC1	Power for channels 1,2,3 and 4 (BTL). (SVCC short-cirrcuited)
10	REGOUT	Regulator pin (External PNP collector).
11	VIN1	Input pin for channel 1
12*	VIN1G	Input pin for channel 1 (for gain control)
13	VIN2	Input pin for channel 2
14*	VIN2G	Input pin for channel 2 (for gain control)
15	VIN3	Input pin for channel 3
16*	VIN3G	Input pin for channel 3 (for gain control)
17	VIN4	Input pin for channel 4
18*	VIN4G	Input pin for channel 4 (for gain control)
19	FWD5	CH5 Output change pin (FWD). Logic input for bridge.
20	REV5	CH5 Output change pin (REV). Logic input for bridge.
21	VCONT5	Input pin for CH5 output voltage control
22	FWD6	CH6 Output change pin (FWD). Logic input for bridge.
23	REV6	CH6 Output change pin (REV). Logic input for bridge.
24	VCONT6	Input pin for CH5 output voltage control.
25	VREFIN	Reference voltage input pin.
26	SGND	Signal system GND
27	SVCC	Signal system power (PVCC1 short - circuited)
28	PVCC2	Power for channel 5 and 6 (H bridge).
29	MUTE	Input pin for BTL mute.
30	PGND2	Power GND for channels 5 and 6 (H bridge).
31	TR+	H bridge Output pin (+) for tray motor.
32	TR-	H bridge Output pin (-) for tray motor.
33	CAM+	H bridge Output pin (+) for cam motor.
34	CAM-	H bridge Output pin (-) for cam motor.
35	TR+	BTL Output pin (+) for tracking coil.
36	TR-	BTL Output pin (-) for tracking coil.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

* Set power system GND to the minimum potential together with SGND
* Short-circuit three pins of power system SVSS and PVCC1 externally before use.

IC2 VHILA6261//-1: Focus/Tracking/Spin/Sled Driver (LA6261)

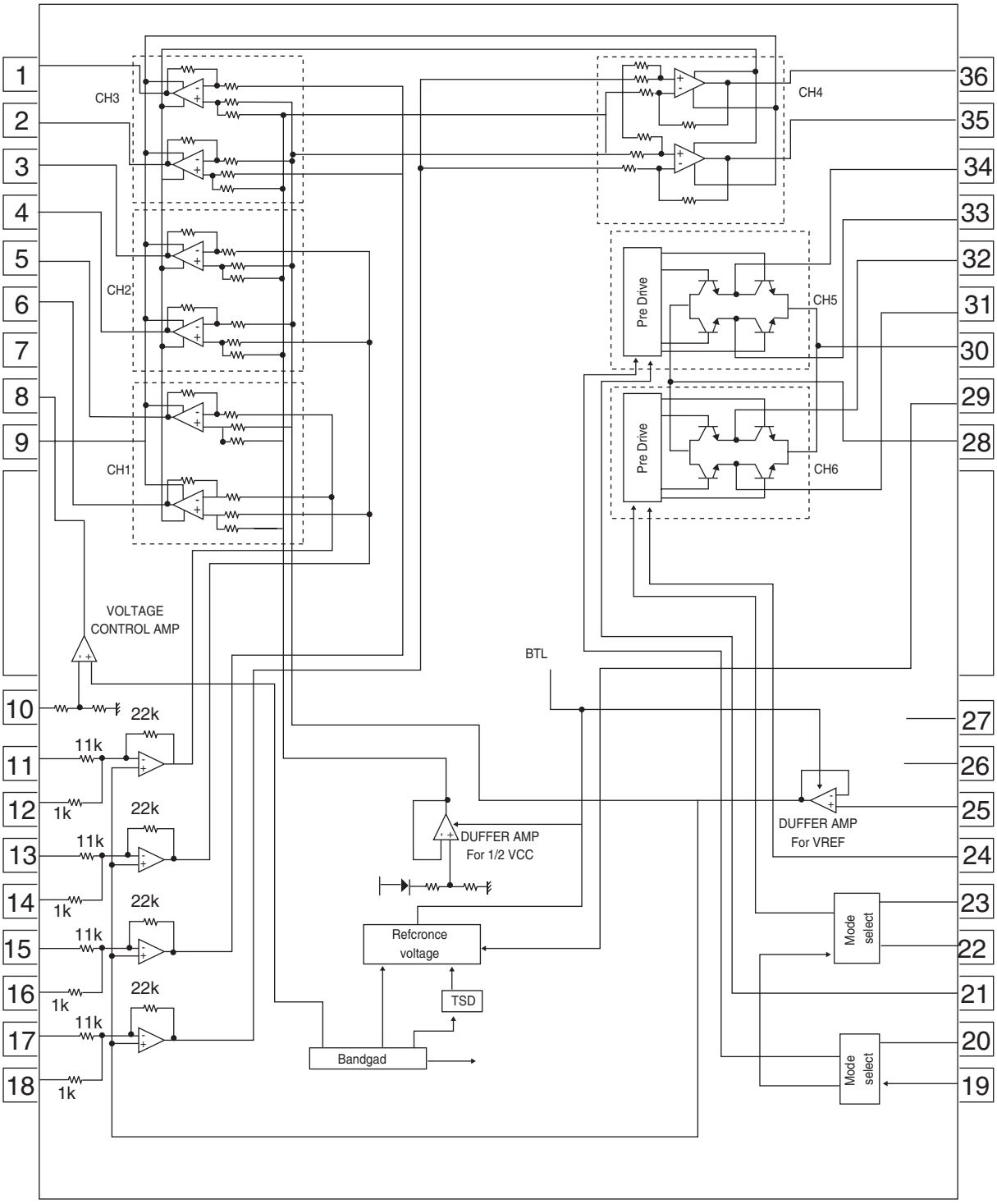


Figure 1 BLOCK DIAGRAM OF IC

IC601 VHiLC75341/-1: Audio Processor (LC75341)

Pin No.	Terminal Name	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin. Data written into an internal latch in a timing of "H" to "L". Each analog switch is activated. Data transfer enabled at "H" level.
3	VSS	Ground pin.
4	LOUT	Bass band filter comprising capacitor and resistor connection pin and bass/treble output pin.
5	LBASS	Bass band filter comprising capacitor and resistor connection pin.
6	LTRE	Treble band filter comprising capacitor and resistor connection pin.
7	LIN	Volume + equaliser output pin.
8	LSEL0	Input selector output pin.
9-12	L4-1	Input signal pin.
13-16	R1-4	Input signal pin.
17	RSEL0	Input selector output pin.
18	RIN	Volume + equaliser output pin
19	RTRE	Treble band filter comprising capacitor and resistor connection pin.
20	RBASS	Bass band filter comprising capacitor and resistor connection pin.
21	ROUT	Bass band filter comprising capacitor and resistor connection pin and bass/ treble output pin.
22	VREF	0.5x VDD voltage generation block for analog ground. Capacitor of several 10µF to be connected between VREF and AWSS (VSS) as a countermeasure against power ripple.
23	VDD	Supply pin
24	CLK	Serial data and clock input pin for control.

IC601 VHiLC75341/-1: Audio Processor (LC75341)

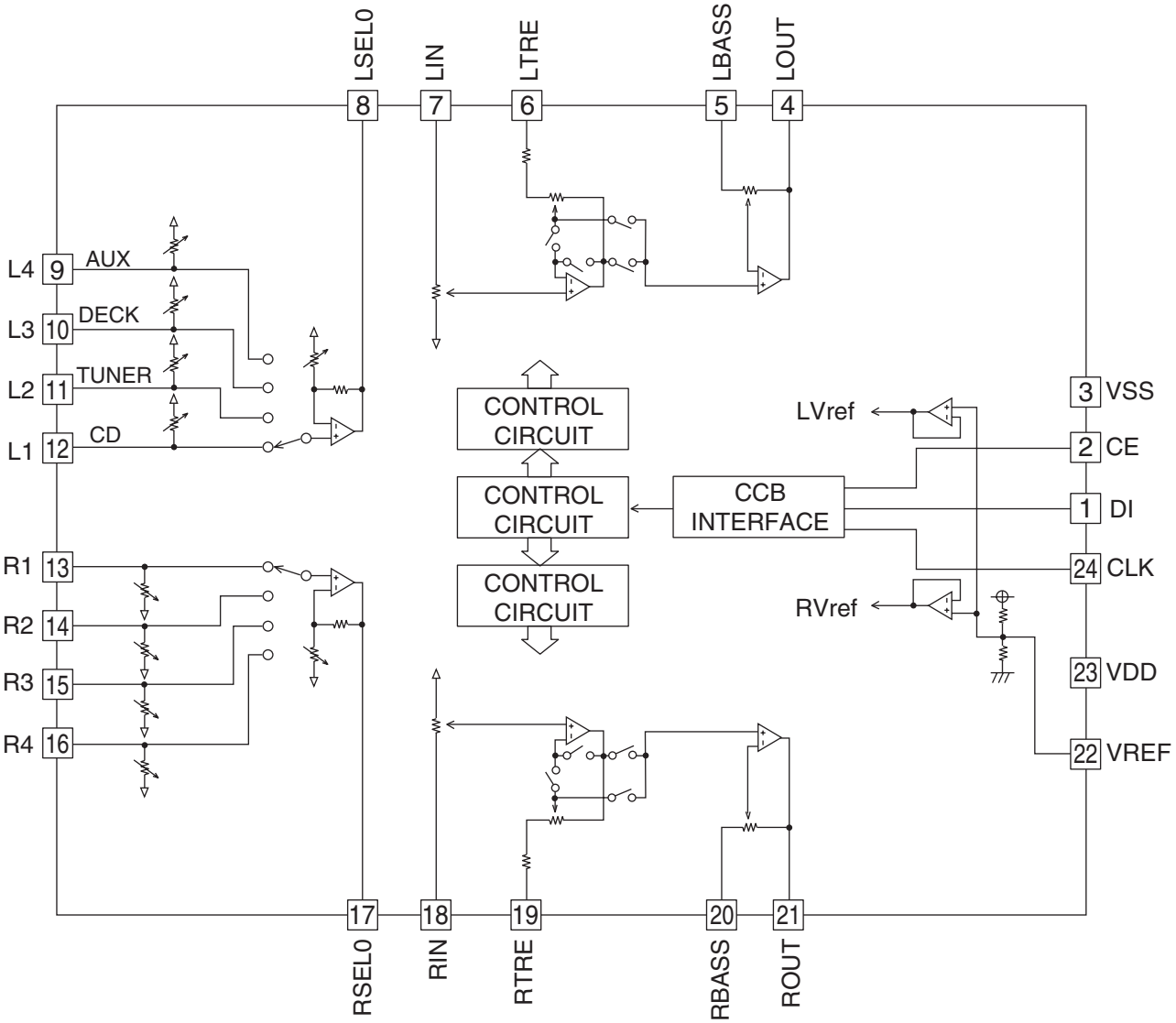


Figure 2 BLOCK DIAGRAM OF IC

CONNECTION DIAGRAMS

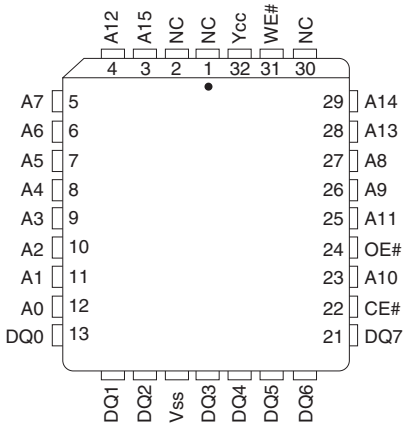


Figure 3 BLOCK DIAGRAM OF IC

Pin Name	Function
A0-A15	Addresses
DQ0-DQ7	8 Data Input/Outputs
WE#	Write Enable
CE#	Chip Enable
OE#	Output Enable
Vcc	Supply Voltage
Vss	Ground

Table 1 PIN DESCRIPTION

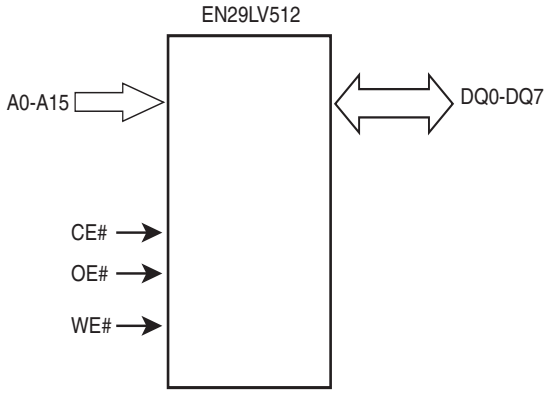


Figure 4 LOGIC DIAGRAM

IC7 RH-IXA093AW00: USB MICOM

BLOCK DIAGRAM

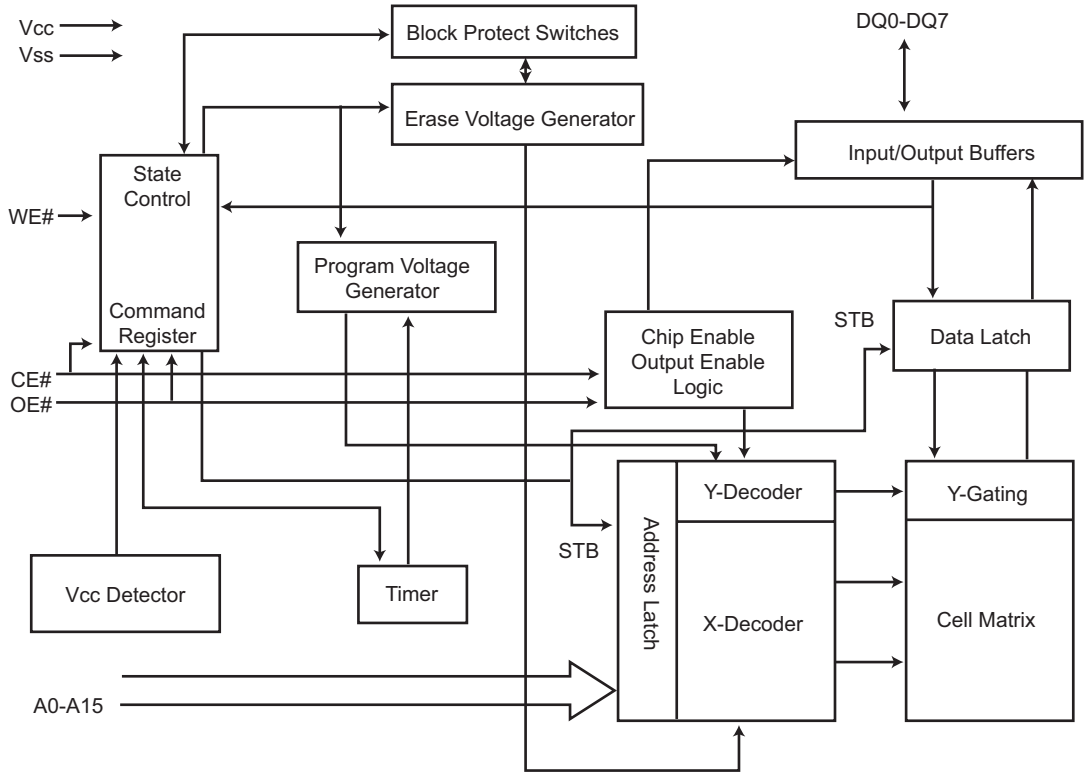


Figure 5 BLOCK DIAGRAM OF IC

IC1 VHTTA2157FN-1:CD PRE-AMP

BLOCK DIAGRAM

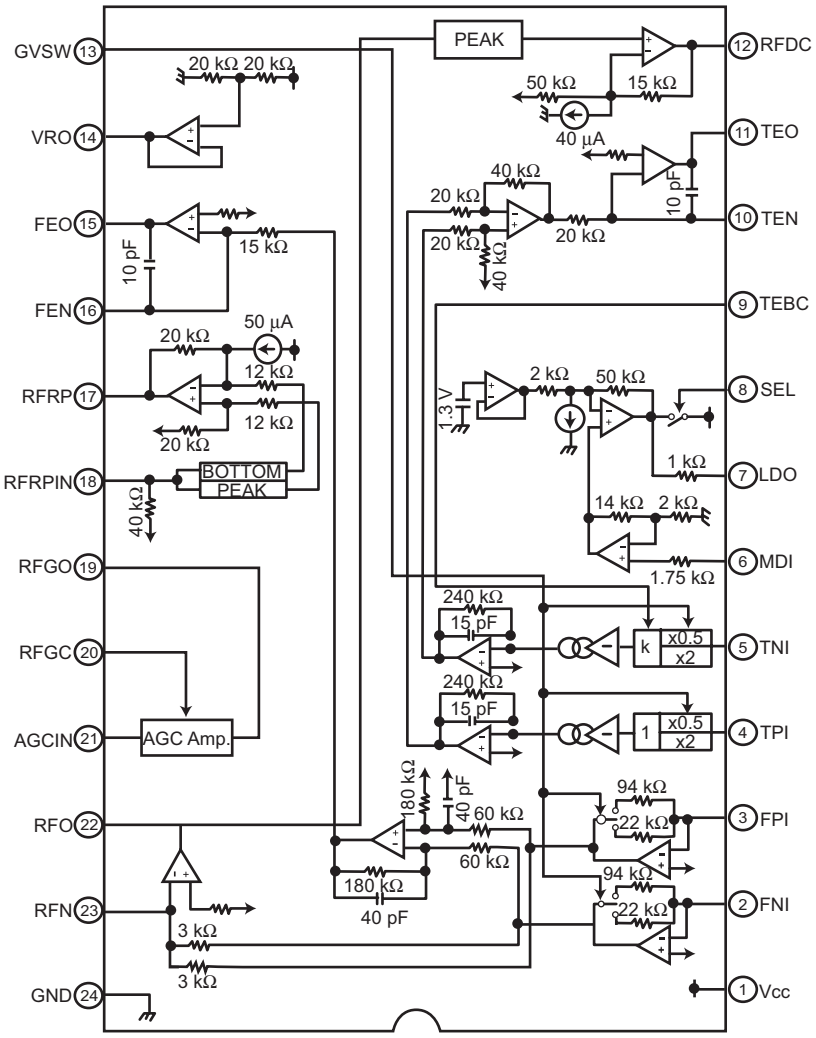


Figure 6 BLOCK DIAGRAM OF IC

PIN / V_{CTRL}	SEL (APC SW)	TEB (TE BAL)	RFGC (AGC Gain)	GVSW
V_{CC}	APC ON	-50%	+12dB	NORMAL PLAYBACK MODE (0dB)
HIZ	APC ON	0%	+6dB	NORMAL MODE (0dB)
GND	APC OFF (LDO=H)	+50%	0dB	CD-RW MODE (+12dB)

IC6 VHIOTI6888QFP: USB DRIVER

BLOCK DIAGRAM

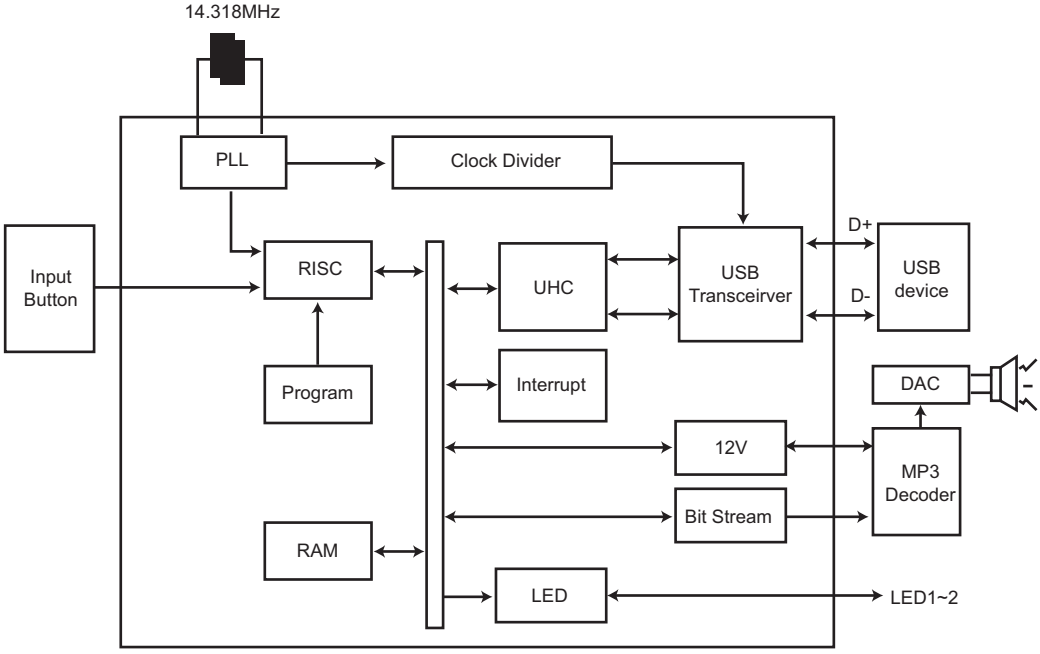


Figure 7 BLOCK DIAGRAM OF IC

IC701 VHIM66005AF-1:FL DRIVER

PIN CONFIGURATION

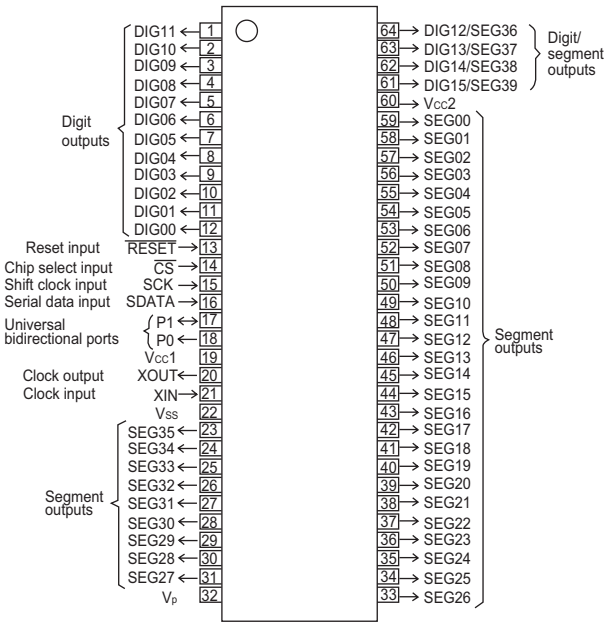


Figure 8 PIN CONFIGURATION OF IC

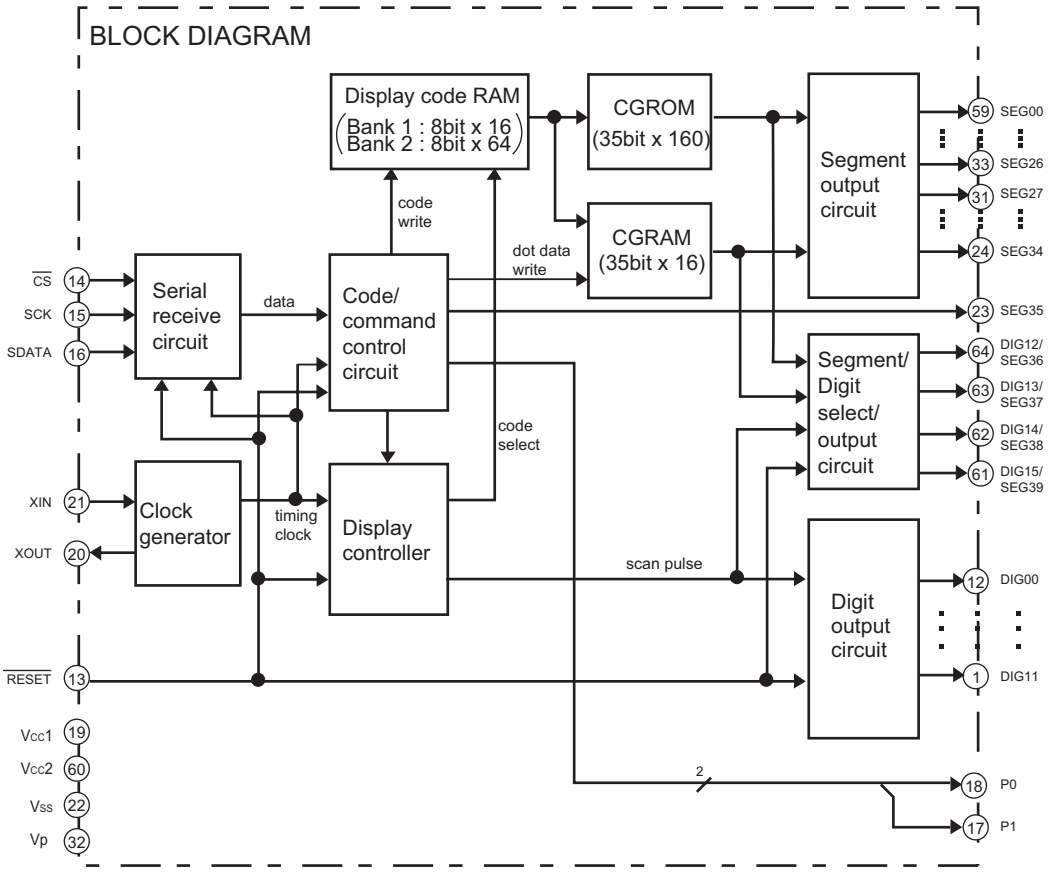


Figure 9 BLOCK DIAGRAM OF IC

IC851 VHIAN80T53/-1: MULTI REGULATOR (AN80T53)

Pin No.	Terminal Name	Function
1	REG4 Output	5.1 V power supply with a minimum peak out current of 1200 mA.
2	REG3 Output	13 V power supply with a minimum peak out current of 1350 mA.
3	VCC	Connected to Power supplies.
4	GND	Connected to the IC substrate.
5	MODE 1	REG1, REG2,REG3 and REG4 outputs are turned ON when this pin is 5 V.
6	REG2 Output	10 V power supply with a minimum peak out current of 800 mA.
7	REG1 Output	8.5 V power supply with a minimum peak out current of 700 mA.

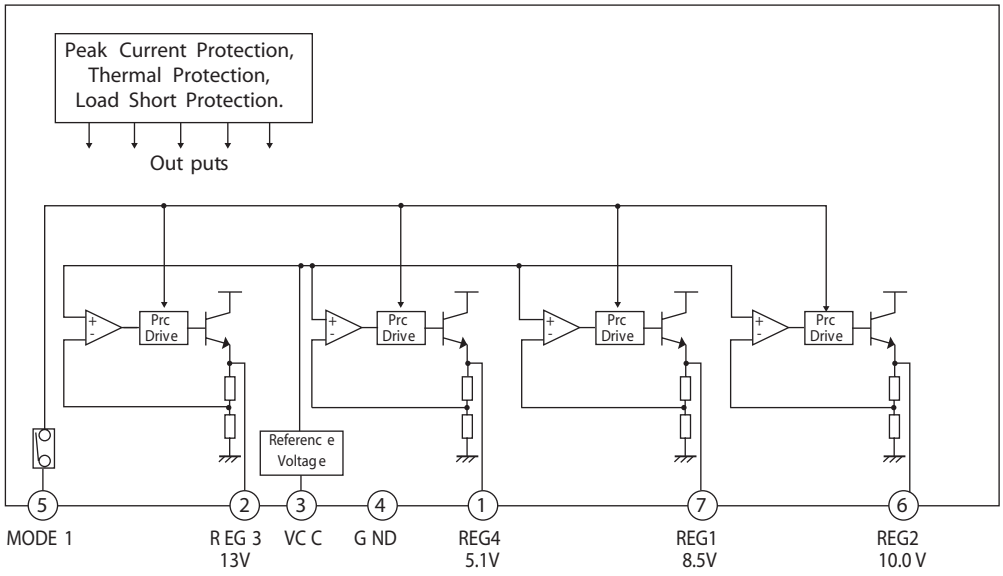
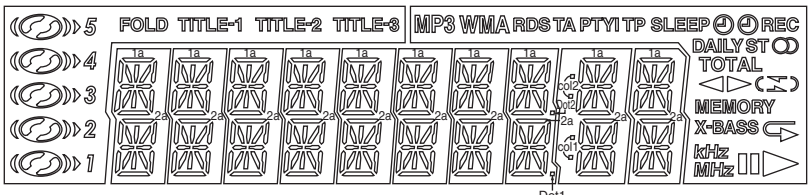


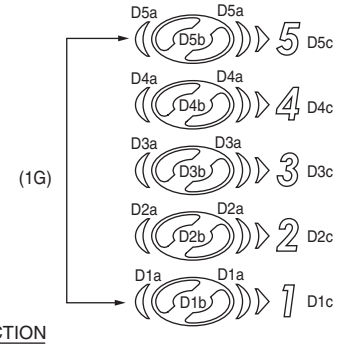
Figure 10 BLOCK DIAGRAM OF IC

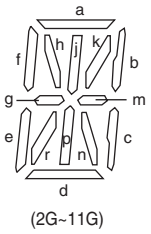
[2] FL DISPLAY

FL701 VVKNA12MM54-1

GRID ASSIGNMENT 1G 12G







ANODE CONNECTION

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G
P1	FOLD	1a	1a	1a	1a	1a	1a	1a	1a	1a	1a	
P2	TITLE-1	1b	1b	1b	1b	1b	1b	1b	1b	1b	1b	
P3	TITLE-2	1k	1k	1k	1k	1k	1k	1k	1k	1k	1k	TOTAL
P4	TITLE-3	1j	1j	1j	1j	1j	1j	1j	1j	1j	1j	RDS
P5	5	1h	1h	1h	1h	1h	1h	1h	1h	1h	1h	TA
P6	D5a	1f	1f	1f	1f	1f	1f	1f	1f	1f	1f	WMA
P7	D5b	1m	1m	1m	1m	1m	1m	1m	1m	1m	1m	PTYI
P8	D5c	1d	1d	1d	1d	1d	1d	1d	1d	1d	1d	TP
P9	4	1g	1g	1g	1g	1g	1g	1g	1g	1g	1g	SLEEP
P10	D4a	1p	1p	1p	1p	1p	1p	1p	1p	1p	1p	DAILY
P11	D4b	1e	1e	1e	1e	1e	1e	1e	1e	1e	1e	(L)
P12	D4c	1n	1n	1n	1n	1n	1n	1n	1n	1n	1n	(R)
P13	3	1r	1r	1r	1r	1r	1r	1r	1r	1r	1r	REC
P14	D3a	1c	1c	1c	1c	1c	1c	1c	1c	1c	1c	ST
P15	D3b	2a	2a	2a	2a	2a	2a	2a	2a	2a	2a	◁
P16	D3c	2b	2b	2b	2b	2b	2b	2b	2b	2b	2b	▷
P17	2	2k	2k	2k	2k	2k	2k	2k	2k	2k	2k	∞
P18	D2a	2j	2j	2j	2j	2j	2j	2j	2j	2j	2j	(
P19	D2b	2h	2h	2h	2h	2h	2h	2h	2h	2h	2h	ϟ
P20	D2c	2f	2f	2f	2f	2f	2f	2f	2f	2f	2f	)
P21	1	2m	2m	2m	2m	2m	2m	2m	2m	2m	2m	MEMORY
P22	D1a	2d	2d	2d	2d	2d	2d	2d	2d	2d	2d	↺
P23	D1b	2g	2g	2g	2g	2g	2g	2g	2g	2g	2g	▷(II)
P24	D1c	2p	2p	2p	2p	2p	2p	2p	2p	2p	2p	kHz
P25		2e	2e	2e	2e	2e	2e	2e	2e	2e	2e	MHz
P26		2n	2n	2n	2n	2n	2n	2n	2n	2n	2n	II
P27		2r	2r	2r	2r	2r	2r	2r	2r	2r	2r	MP3
P28		2c	2c	2c	2c	2c	2c	2c	2c	2c	2c	X-BASS
P29									Dot1	Col1		
P30									Dot2	Col2		

OUTER DIMENSIONS

PIN CONNECTION

PIN NO.	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26
CONNECTION	F2	F2	NP	NP	P30	P29	P28	P27	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	P16	P15	P14	P13	P12	P11	P10	P9

PIN NO.	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
CONNECTION	P8	P7	P6	P5	P4	P3	P2	P1	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	NX	NX	2G	1G	NP	F1	F1

SHARP PARTS GUIDE

MICRO COMPONENT SYSTEM

MODEL XL-UH240

XL-UH240 Micro Component System consisting of XL-UH240 (main unit) and CP-UH240 (speaker system).

CONTENTS

[1] INTEGRATED CIRCUITS

[2] TRANSISTORS

[3] DIODES

[4] VIBRATORS / CRYSTALS

[5] TRANSFORMERS

[6] COILS

[7] CAPACITORS

[8] RESISTORS

[9] OTHER CIRCUITRY PARTS

[10] CD MECHANISM PARTS

[11] CHANGER MECHANISM PARTS

[12] CABINET PARTS

[13] SPEAKER BOX PARTS

[14] ACCESSORIES

[15] P.W.B. ASSEMBLY (Not Replacement Item)

[16] OTHER SERVICE PARTS

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[1] INTEGRATED CIRCUITS					
IC1	VHITA2157FN-1	AM			CD PRE-AMP
IC2	VHILA6261//-1	AN			Focus/Tracking/Spin/Sled Driver, LA6261
IC3	VHITC94A14A-1	AW			CD DSP
IC4	VHITC94A34FG1	BA			MP3 Decoder/Digital Signal Processor, TC94A34FG
IC5	VHIAK4384//-1	AM			24 BIT 2CH DAC (20P)
IC6	VHIOTI6888QFP	AZ			USB DRIVER
IC7	RH-IXA093AW00	AN			USB MICOM (OTP TYPE)
IC8	VHI6206P152-1	AE			CMOS IC (1.5V)
IC9	VHI6206P332-1	AE			CMOS IC (3.3V)
IC601	VHILC75341M-1	AM			Audio Processor,LC75341
IC701	VHIM66005AF-1	AT			FL DRIVER
IC702	RH-IXA088AW00	BD			SYSTEM MICOM
IC703	VHIPST9127/-1	AG			Reset,PST9127
IC704	VHIL4931Z33-1	AF			REGULATOR 3.3V
IC705	VHIL4931Z33-1	AF			REGULATOR 3.3V
IC851	VHIAN80T53/-1	AL			MULTI REGULATOR IC
IC852	VHIKIA7805AP1	AF			Constant Voltage Regulator,KIA7805AP
IC854	VHIKIA78L05-1	AF			Constant Voltage Regulator,KIA78L05
IC901	VHISTK41241-1	BA			Power Amp,STK412-410
ICS01	VHIKIA4558F-1	AF			Power Amp,KIA4558F
[2] TRANSISTORS					
Q1	VSKTA1504GR-1	AB			Silicon,PNP,KTA1504 GR
Q2	VSKTA1271Y/-1	AC			Silicon,PNP,KTA1271 Y
Q3	VSKRC102S//-1	AB			Digital,NPN,KRC102 S
Q4	VSKRC104S//-1	AC			Digital,NPN,KRC104 S
Q5	VSKTA1271Y/-1	AC			Silicon,PNP,KTA1271 Y
Q7	VSKRC107S//-1	AB			Digital,NPN,KRC107 S
Q9	VSKTA1504GR-1	AB			Silicon,PNP,KTA1504GR
Q10	VSKRC104S//-1	AC			Digital,NPN,KRC104 S
Q11	VSKTA1544T/-1	AD			Silicon,PNP,KTA1544T
Q12	VSKRC102S//-1	AB			Digital,NPN,KRC102 S
Q603	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q604	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q608	VSKRA102S//-1	AB			Digital,PNP,KRA102 S
Q610	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q611	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q612	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q613	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q614	VSKTA1504GR-1	AB			Silicon,PNP,KTA1504GR
Q701	VSKRC104S//-1	AC			Digital,NPN,KRC104 S
Q702	VSKRC104S//-1	AC			Digital,NPN,KRC104 S
Q704	VSKRC104S//-1	AC			Digital,NPN,KRC104 S
Q706	VSKRC102S//-1	AB			Digital,NPN,KRC102 S
Q801	VSKTA1274Y/-1	AE			Silicon,PNP,KTA1274 Y
Q841	VSKTC3199GR-1	AB			Silicon,NPN,KTC3199 GR
Q860	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q901	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q902	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q903	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q904	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q905	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q906	VSKTC3203Y/-1	AE			Silicon,NPN,KTC3203 Y
Q907	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
Q908	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
QS01	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
QS03	VSKTC3205Y/-1	AD			Silicon,NPN,KTC3205 Y
QS05	VSKRC104S//-1	AC			Digital,NPN,KRC104 S
QS11	VSKTC3875GR-1	AB			Silicon,NPN,KTC3875 GR
QS15	VSKRC104S//-1	AC			Digital,NPN,KRC104 S
[3] DIODES					
D1	VHDKDS160//-1	AB			Silicon,KDS160
D2	VHDKDS160//-1	AB			Silicon,KDS160
D3	VHDKDS184//-1	AB			Silicon,KDS184
D603	VHD1SS119//-1	AA			Silicon,D1SS119
D604	VHDDS1N404S-1	AB			Silicon,DS1N404S
D605	VHDDS1N404S-1	AB			Silicon,DS1N404S
D701	VHDKDS160//-1	AB			Silicon,KDS160
D702	VHD1SS119//-1	AA			Silicon,D1SS119
D705	VHDDS1N404S-1	AB			Silicon,DS1N404S
D706	VHDDS1N404S-1	AB			Silicon,DS1N404S
D707	VHDKDS160//-1	AB			Silicon,KDS160
D710	VHDKDS160//-1	AB			Silicon,KDS160
D711	VHDKDS160//-1	AB			Silicon,KDS160
D712	VHDKDS160//-1	AB			Silicon,KDS160
D752	VHD1N4148H/-1	AA			Silicon,D1N4148H
D801	VHDTS10B05G-1	AH			Silicon,TS10B05G-1
D802	VHDTS4B05GM-1	AG			Silicon,TS4B05GM-1
D803	VHDRL204F//-1	AC			Silicon,RL204F
D804	VHDRL204F//-1	AC			Silicon,RL204F
D805	VHDDS1N404S-1	AB			Silicon,DS1N404S
D806	VHDDS1N404S-1	AB			Silicon,DS1N404S
D842	VHDDS1N404S-1	AB			Silicon,DS1N404S
D843	VHDDS1N404S-1	AB			Silicon,DS1N404S

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[3] DIODES					
D844	VHDDS1N404S-1	AB			Silicon,DS1N404S
D845	VHDDS1N404S-1	AB			Silicon,DS1N404S
D846	VHDDS1N404S-1	AA			Silicon,DS1N404S
D853	VHDDS1N404S-1	AB			Silicon,DS1N404S
D855	VHD1SS119//-1	AA			Silicon,D1SS119
D856	VHD1SS119//-1	AA			Silicon,D1SS119
D860	VHD1SS119//-1	AA			Silicon,D1SS119
D861	VHD1SS119//-1	AA			Silicon,D1SS119
D862	VHD1SS119//-1	AA			Silicon,D1SS119
D863	VHDKDS160//-1	AB			Silicon,KDS160
D864	VHD1SS119//-1	AA			Silicon,D1SS119
D868	VHDKDS160//-1	AB			Silicon,KDS160
D905	VHD1SS119//-1	AA			Silicon,D1SS119
D906	VHD1SS119//-1	AA			Silicon,D1SS119
D907	VHD1SS119//-1	AA			Silicon,D1SS119
D909	VHDDS1N404S-1	AB			Silicon,DS1N404S
D910	VHDDS1N404S-1	AB			Silicon,DS1N404S
D911	VHD1SS119//-1	AA			Silicon,D1SS119
D912	VHDKDS160//-1	AB			Silicon,KDS160
D913	VHDKDS160//-1	AB			Silicon,KDS160
D914	VHD1SS119//-1	AA			Silicon,D1SS119
D915	VHD1SS119//-1	AA			Silicon,D1SS119
DS01	VHD1SS119//-1	AA			Silicon,D1SS119
DS03	VHDKDS160//-1	AB			Silicon,KDS160
DS05	VHDKDS160//-1	AB			Silicon,KDS160
DS09	VHDKDS160//-1	AB			Silicon,KDS160
LED701	VHPSLR343VC3F	AC			LED,Red,SLR343VC3F
LED702	VHPSDPB40F2A-	AK			LED,Blue,SDPB40F2A
LED708	VHPSDPB50CDC1	AK			LED,Blue,SDPB50CDC
ZD801	VHEDZ6R2BSA-1	AB			Zener,6.2V,DZ6.2BSA
ZD802	VHEDZ6R8BSA-1	AC			Zener,6.8V,DZ6.8BSA
ZD803	VHEDZ300BSB-1	AB			Zener,30V,DZ300BSB
ZD805	VHEDZ150BSB-1	AB			Zener,15V,DZ150BSB
ZD860	VHEDZ110BSB-1	AB			Zener,11V,DZ110BSB
ZD902	VHEDZ120BSB-1	AB			Zener,12V,DZ120BSB
ZD903	VHEDZ120BSB-1	AB			Zener,12V,DZ120BSB
[4] VIBRATORS/CRYSTALS					
X1	RCRSP0020AWZZ	AG			Crystal,16.93MHz
X2	RCRSPA006AWZZ	AF			Crystal,14.31818MHz
XL701	RCRSP0011AWZZ	AC			Crystal,32.768KHz
XL702	RCRM-A002AWZZ	AD			Ceramic,9.83MHz
[5] TRANSFORMERS					
⚠ PT801	RTRNPA035AWZZ	BG			Power (Main)
⚠ PT841	RTRNP0483AWZZ	AL			Power (Sub)
[6] COILS					
FB1	RBLN-0061TAZZ	AB			Chip Ferrite Core
FC1	RC0RF0024AWZZ	AD			Ferrite Core
L701	VP-DH220K0000	AB			22 µH,Peaking
L702	VP-DH220K0000	AB			22 µH,Peaking
L703	VP-DH470K0000	AB			47 µH,Peaking
L901	RCILZ0024AWZZ	AC			3 µH,Choke
L902	RCILZ0024AWZZ	AC			3 µH,Choke
L903	VP-DH2R2K0000	AB			2.2 µH,Peaking
[7] CAPACITORS					
C1	VCEAZA1AW227M	AC			220 µF,10V,Electrolytic
C2	VCEAZA1AW227M	AC			220 µF,10V,Electrolytic
C3	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C4	VCKYCY1CB104K	AB			0.1 µF,16V
C5	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C6	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C7	VCKYCY1CB223K	AA			0.022 µF,16V
C8	VCKYCY1CB223K	AA			0.022 µF,16V
C9	VCEAZA1AW227M	AC			220 µF,10V,Electrolytic
C10	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C11	VCKYCY1CB104K	AB			0.1 µF,16V
C12	VCEAZA1HW106M	AC			1000 µF,6.3V,Electrolytic
C13	VCKYCY1CB223K	AA			0.022 µF,16V
C14	VCEAZA0JW108M	AB			10 µF,50V,Electrolytic
C15	VCKYCY1HB103K	AA			0.01 µF,50V
C16	VCKYCY1CB104K	AA			0.1 µF,16V
C17	VCKYCY1CB104K	AB			0.1 µF,16V
C18	VCKYCY1HB682K	AA			0.0068 µF,50V
C19	VCKYCY1CB104K	AB			0.1 µF,16V
C20	VCKYCY1CB104K	AB			0.1 µF,16V
C21	VCCCCY1HH1R0C	AA			1 p F (CH),50V
C22	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C23	VCKYCY1CB104K	AB			0.1 µF,16V
C24	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C25	VCKYCY1CB104K	AB			0.1 µF,16V
C26	VCEAZA1EW476M	AB			47 µF,25V,Electrolytic

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[7] CAPACITORS					
C27	VCCCCY1HH470J	AA			47 pF (CH),50V
C28	VCEAZA1HW106M	AB			10 µF,50V,Electrolytic
C29	VCKYCY1HB153K	AA			0.015 µF,16V
C30	VCKYCY1CB333K	AA			0.033 µF,16V
C31	VCKYCY1CB473K	AA			0.047 µF,16V
C32	VCKYCY1CB333K	AA			0.033 µF,16V
C33	VCKYCY1HB103K	AA			0.01 µF,50V
C34	VCKYCY1HB272K	AA			0.0027 µF,50V
C35	VCKYCY1HB103K	AA			0.01 µF,50V
C36	VCCCCY1HH470J	AA			47p F (CH),50V
C37	VCKYCY1CB104K	AB			0.1 µF,16V
C38	VCCCCY1HH221J	AA			220 p F (CH),50V
C39	VCEAZA1EW476M	AB			47 µF,25V,Electrolytic
C40	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C41	VCCCCY1HH471J	AA			470 p F (CH),50V
C42	VCKYCY1CB104K	AB			0.1 µF,16V
C43	VCKYCY1CB473K	AA			0.047 µF,16V
C44	VCKYCY1CB473K	AA			0.047 µF,16V
C45	VCKYCY1CB473K	AA			0.047 µF,16V
C46	VCKYCY1CB473K	AA			0.047 µF,16V
C47	VCEAZA1EW476M	AB			47 µF,25V,Electrolytic
C48	VCKYCY1CB104K	AB			0.1 µF,16V
C49	VCKYCY1CB104K	AB			0.1 µF,16V
C50	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C51	VCCCCY1HH9R0D	AA			9 p F (CH),50V
C52	VCCCCY1HH9R0D	AA			9 p F (CH),50V
C53	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C54	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C55	VCEAZA1EW476M	AB			47 µF,25V,Electrolytic
C56	VCKYCY1CB104K	AB			0.1 µF,16V
C57	VCKYCY1CB104K	AB			0.1 µF,16V
C58	VCCCCY1HH101J	AA			100 p F (CH),50V
C59	VCKYCY1CB104K	AB			0.1 µF,16V
C60	VCKYCY1CB104K	AB			0.1 µF,16V
C61	VCKYCY1CB105K	AB			1 µF,16V
C62	VCKYCY1CB104K	AB			0.1 µF,16V
C63	VCKYCY1CB104K	AB			0.1 µF,16V
C64	VCKYCY1HB271K	AA			270 pF,50V
C65	VCKYCY1CB105K	AB			1 µF,16V
C66	VCKYCY1CB105K	AB			1 µF,16V
C67	VCKYCY1CB104K	AB			0.1 µF,16V
C68	VCKYCY1CB104K	AB			0.1 µF,16V
C69	VCKYCY1CB105K	AB			1 µF,16V
C70	VCKYCY1CB104K	AB			0.1 µF,16V
C71	VCKYCY1CB104K	AB			0.1 µF,16V
C72	VCKYCY1CB104K	AB			0.1 µF,16V
C73	VCKYCY1CB104K	AB			0.1 µF,16V
C74	VCKYCY1CB104K	AB			0.1 µF,16V
C75	VCKYCY1CB104K	AB			0.1 µF,16V
C76	VCKYCY1CB104K	AB			0.1 µF,16V
C77	VCKYCY1CB104K	AB			0.1 µF,16V
C78	VCEAZA1HW106M	AB			10 µF,50V,Electrolytic
C79	VCKYCY1HB222K	AA			0.0022 µF,50V
C80	VCKYCY1CB104K	AB			0.1 µF,16V
C81	VCCCCY1HH330J	AA			33 p F (CH),50V
C82	VCCCCY1HH330J	AA			33 p F (CH),50V
C83	VCKYCY1CB104K	AB			0.1 µF,16V
C84	VCKYCY1HB103K	AA			0.01 µF,50V
C85	RC-EZ0007AWZZ	AF			10 µF,10V,Electrolytic
C86	VCKYCY1CB104K	AB			0.1 µF,16V
C87	VCKYCY1CB104K	AB			0.1 µF,16V
C88	VCCCCY1HH101J	AA			100 p F (CH),50V
C89	VCCCCY1HH101J	AA			100 p F (CH),50V
C90	VCCCCY1HH101J	AA			100 p F (CH),50V
C91	VCCCCY1HH101J	AA			100 p F (CH),50V
C92	VCCCCY1HH101J	AA			100 p F (CH),50V
C93	VCCCCY1HH101J	AA			100 p F (CH),50V
C94	VCCCCY1HH101J	AA			100 p F (CH),50V
C95	VCCCCY1HH101J	AA			100 p F (CH),50V
C96	VCCCCY1HH101J	AA			100 p F (CH),50V
C99	VCKYCY1CB104K	AB			0.1 µF,16V
C100	VCCCCY1HH101J	AA			100 p F (CH),50V
C101	VCCCCY1HH101J	AA			100 p F (CH),50V
C102	VCCCCY1HH101J	AA			100 p F (CH),50V
C103	VCCCCY1HH101J	AA			100 p F (CH),50V
C104	VCKYCY1CB104K	AB			0.1 µF,16V
C105	VCCCCY1HH220J	AA			22 p F (CH),50V
C106	VCCCCY1HH220J	AA			22 p F (CH),50V
C107	VCCCCY1HH220J	AA			22 p F (CH),50V
C108	VCCCCY1HH101J	AA			100 p F (CH),50V
C109	VCCCCY1HH101J	AA			100 p F (CH),50V
C110	VCCCCY1HH101J	AA			100 p F (CH),50V
C111	VCKYCY1CB104K	AB			0.1 µF,16V
C112	VCKYCY1CB104K	AB			0.1 µF,16V
C113	VCKYCY1CB104K	AB			0.1 µF,16V

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[7] CAPACITORS					
C115	VCKYCY1HB102K	AA			0.001 µF,50V
C601	VCEAZA1CW227M	AC			220 µF,16V,Electrolytic
C602	VCKYCY1EF223Z	AB			0.022 µF,25V
C603	VCEAZA1EW226M	AB			22 µF,25V,Electrolytic
C605	VCFYFA1HA124J	AL			0.12 µF,50V,Thin Film
C606	VCFYFA1HA124J	AL			0.12 µF,50V,Thin Film
C607	VCFYFA1HA154J	AB			0.15 µF,50V,Thin Film
C608	VCFYFA1HA154J	AB			0.15 µF,50V,Thin Film
C610	VCEAZA1HW226M	AB			22 µF,50V,Electrolytic
C611	VCKYCY1HB272K	AA			0.0027 µF,50V
C612	VCKYCY1HB272K	AA			0.0027 µF,50V
C613	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C614	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C615	VCEAZA1HW475M	AB			4.7 µF,50V,Electrolytic
C616	VCEAZA1HW475M	AB			4.7 µF,50V,Electrolytic
C617	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C618	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C621	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C622	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C623	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C624	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C625	VCKYCY1HB222K	AA			0.0022 µF,50V
C626	VCKYCY1HB222K	AA			0.0022 µF,50V
C637	VCKYCY1HB102K	AA			0.001 µF,50V
C638	VCKYCY1HB102K	AA			0.001 µF,50V
C640	VCEAZA1HW226M	AB			22 µF,50V,Electrolytic
C646	VCKYCY1HB102K	AA			0.001 µF,50V
C647	VCKYCY1HB102K	AA			0.001 µF,50V
C651	VCKYCY1HB221K	AA			220 p F,50V
C652	VCKYCY1HB221K	AA			220 p F,50V
C653	VCKYCY1HB221K	AA			220 p F,50V
C677	VCEAZA1AW107M	AB			100 µF,10V,Electrolytic
C678	VCKYCY1HB103K	AA			0.01 µF,50V
C679	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C680	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C690	VCKYCY1HB391K	AA			390 p F,50V
C691	VCKYCY1HB391K	AA			390 p F,50V
C693	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C694	VCEAZA1HW105M	AB			1 µF,50V,Electrolytic
C701	VCCCCY1HH150J	AA			15 p F (CH),50V
C702	VCCCCY1HH150J	AA			15 p F (CH),50V
C703	VCEAZA0JW108M	AC			1000 µF,6.3V,Electrolytic
C704	VCCCCY1HH101J	AA			100 p F (CH),50V
C705	VCKYCY1HB103K	AB			0.01 µF,50V
C706	RC-EZD475AF1H	AB			4.7 µF,50V,Electrolytic
C707	VCKYCY1HB103K	AA			0.01 µF,50V
C708	VCKYCY1EF104Z	AA			0.1 µF,25V
C709	RC-EZD106AF1C	AB			10 µF,16V,Electrolytic
C710	VCKYCY1CF105Z	AB			1 µF,16V
C711	VCKYCY1CF105Z	AB			1 µF,16V
C715	VCKYCY1CF105Z	AB			1 µF,16V
C716	VCKYCY1CF105Z	AB			1 µF,16V
C717	VCCCCY1HH151J	AA			150 p F (CH),50V
C718	VCKYCY1EF223Z	AB			0.022 µF,25V
C719	RC-EZD476AF1C	AC			47 µF,16V,Electrolytic
C720	VCKYCY1HB102K	AA			0.001 µF,50V
C721	VCKYCY1HB102K	AA			0.001 µF,50V
C722	VCEAZA1CW106M	AC			10 µF,16V,Electrolytic
C725	VCCCCY1HH271J	AA			270 p F (CH),50V
C726	VCEAZA1HW474M	AB			0.47 µF,50V,Electrolytic
C727	VCCCCY1HH820J	AA			82 p F (CH),50V
C728	RC-EZD226AF1C	AB			22 µF,16V,Electrolytic
C729	VCKYCY1EF104Z	AA			0.1 µF,25V
C730	VCCCCY1HH100D	AA			10 p F (CH),50V
C731	VCCCCY1HH100D	AA			10 p F (CH),50V
C732	VCKYCY1HB102K	AA			0.001 µF,50V
C733	VCCCCY1HH271J	AA			270 p F (CH),50V
C734	RC-EZD106AF1C	AB			10 µF,16V,Electrolytic
C735	VCKYCY1EF104Z	AA			0.1 µF,25V
C736	RC-EZD105AF1H	AB			1 µF,50V,Electrolytic
C737	RC-EZD105AF1H	AB			1 µF,50V,Electrolytic
C738	VCKYCY1EF104Z	AA			0.1 µF,25V
C739	VCKYCY1HB222K	AA			0.0022 µF,50V
C740	VCKYCY1HB222K	AA			0.0022 µF,50V
C742	VCKYCY1HB222K	AA			0.0022 µF,50V
C743	RC-EZD107AF1A	AB			100 µF,10V,Electrolytic
C746	VCKYCY1HB103K	AA			0.01 µF,50V
C748	VCCCCY1HH470J	AA			47 p F (CH),50V
C751	VCCCCY1HH470J	AA			47 p F (CH),50V
C754-C757	VCCCCY1HH101J	AA			100 p F (CH),50V
C758	VCEAEA1CW106M	AC			10 µF,16V, Electrolytic
C759	VCEAEA1CW106M	AC			10 µF,16V, Electrolytic
C801	VCEAZA1VW107M	AC			100 µF,35V,Electrolytic
C802	VCEAZA1HW476M	AB			47 µF,50V,Electrolytic
C803	VCEAZA1HW476M	AB			47 µF,50V,Electrolytic

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[7] CAPACITORS					
C804	VCEAZA1JW227M	AB			220 µF,63V,Electrolytic
C805	VCEAZA2AW226M	AC			22 µF,100V,Electrolytic
C806	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C807	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C808	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C809	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C810	VCFYDA2AA224J	AD			0.22 µF,50V,Thin Film
C811	VCFYDA2AA224J	AD			0.22 µF,50V,Thin Film
C841	VCEAZA0JW108M	AC			1000 µF,6.3V,Electrolytic
C842	VCEAZA1EW477M	AD			470 µF,25V,Electrolytic
C843	VCQYKA1HM473K	AB			0.047 µF,50V,Mylar
C844	RC-KZ002LAWZZ	AC			0.0047 µF,250V,Ceramic
C851	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C852	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C854	VCEAZA1CW107M	AC			100 µF,16V,Electrolytic
C855	VCEAZA1HW106M	AB			10 µF,50V,Electrolytic
C856	VCEAZA1EW338M	AG			3300 µF,25V,Electrolytic
C859	VCEAZA1EW226M	AB			22 µF,50V,Electrolytic
C861	VCKYPA1HF223Z	AB			0.022 µF,50V
C864	VCEAZA1EW226M	AB			22 µF,25V,Electrolytic
C865	VCEAZA1EW226M	AB			22 µF,50V,Electrolytic
C866	VCEAZA1EW476M	AB			47 µF,25V,Electrolytic
C867	VCEAZA1EW226M	AB			22 µF,25V,Electrolytic
C874	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C901	VCEAZA1HW104M	AB			0.1 µF,50V,Electrolytic
C902	VCEAZA1HW104M	AB			0.1 µF,50V,Electrolytic
C903	VCKYCY1HB102K	AA			0.001 µF,50V
C904	VCKYCY1HB102K	AA			0.001 µF,50V
C905	VCEAZA1HW226M	AB			22 µF,50V,Electrolytic
C906	VCEAZA1HW226M	AB			22 µF,50V,Electrolytic
C907	VCCCCY1HH101J	AA			100 p F (CH),50V
C908	VCCCCY1HH3R0C	AA			3 p F (CH),50V
C909	VCQYKA1HM104K	AB			0.1 µF,50V,Mylar
C910	VCCCCY1HH3R0C	AA			3 p F (CH),50V
C911	VCEAZA2AW107M	AD			100 µF,100V,Electrolytic
C912	VCEAZA2AW107M	AD			100 µF,100V,Electrolytic
C913	VCCCCY1HH101J	AA			100 p F (CH),50V
C914	VCEAZA2AW107M	AD			100 µF,100V,Electrolytic
C915	VCEAZA2AW107M	AD			100 µF,100V,Electrolytic
C916	VCEAZA1HW107M	AC			100 µF,50V,Electrolytic
C917	VCKYCY1HB103K	AA			0.01 µF,50V
C918	VCEAZA1HW107M	AC			100 µF,50V,Electrolytic
C919	VCKYCY1HB103K	AA			0.01 µF,50V
C920	RC-EZ3011AWZZ				3300 µF,63V,Electrolytic
C921	RC-EZ0106AWZZ	AH			4700 µF,35V,Electrolytic
C922	RC-EZ0106AWZZ	AH			4700 µF,35V,Electrolytic
C923	RC-EZ3011AWZZ				3300 µF,63V,Electrolytic
C925	VCEAZA1HW476M	AB			47 µF,50V,Electrolytic
C928	VCFYFA1HA104J	AC			0.1 µF,50V,Thin Film
C929	VCFYFA1HA104J	AC			0.1 µF,50V,Thin Film
C930	VCEAZA1HW476M	AB			47 µF,50V,Electrolytic
C931	VCEAZA1HW106M	AB			10 µF,50V,Electrolytic
C946	VCEAZA1HW104M	AB			0.1 µF,50V,Electrolytic
C960	VCEAZA1EW335M	AB			3.3 µF,25V,Electrolytic
C962	VCKYCY1CB104K	AB			0.1 µF,16V
CP740	VCKYCY1CF105Z	AB			1 µF,16V
CP741	RC-EZD227AF1A	AC			220 µF,10V,Electrolytic
CS01	VCKYCY1HB102K	AA			0.001 µF,50V
CS03	VCCCCY1HH101J	AA			100 p F (CH),50V
CS07	VCEAZA1HW226M	AB			22 µF,50V,Electrolytic
CS09	VCEAZA1HW226M	AB			22 µF,50V,Electrolytic
CS13	VCEAZA1HW106M	AB			10 µF,50V,Electrolytic
CS15	VCEAZA1EW476M	AB			47 µF,25V,Electrolytic
CS16	VCEAZA1EW476M	AB			47 µF,25V,Electrolytic
CS18	VCEAZA1CW106M	AC			10 µF,16V,Electrolytic
CS19	VCKYCY1CB104K	AB			0.1 µF,16V
[8] RESISTORS					
L1	VRS-TV2AB000J	AA			0 ohms,1/10W
L2	VRS-TV2AB000J	AA			0 ohms,1/10W
L3	VRS-TV2AB000J	AA			0 ohms,1/10W
L5	VRS-CY1JB000J	AA			0 ohms,Jumper, 0.8x1.55m, Green
L6	VRS-TV2AB000J	AA			0 ohms,1/10W
L7	VRS-CY1JB000J	AA			0 ohms,Jumper, 0.8x1.55m, Green
L8	VRS-CY1JB000J	AA			0 ohms,Jumper, 0.8x1.55m, Green
L9	VRS-CY1JB000J	AA			0 ohms,Jumper, 0.8x1.55m, Green
L10	VRS-CY1JB000J	AA			0 ohms,Jumper, 0.8x1.55m, Green
L11	VRS-CY1JB000J	AA			0 ohms,Jumper, 0.8x1.55m, Green
JP601	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP602	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP603	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP605	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP701	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP702	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP703	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] RESISTORS					
JP704	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP705	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP706	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP707	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP709	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP710	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP711	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP712	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP713	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP714	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP717	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP718	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP719	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP720	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP721	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JP901	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
JPS01	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R2	VRS-CY1JB823J	AA			82 kohms,1/16W
R3	VRS-CY1JB823J	AA			82 kohms,1/16W
R4	VRS-CY1JB823J	AA			82 kohms,1/16W
R5	VRS-CY1JB823J	AA			82 kohms,1/16W
R6	VRS-CY1JB104J	AA			100 kohms,1/16W
R7	VRS-CY1JB104J	AA			100 kohms,1/16W
R8	VRS-CY1JB221J	AA			220 ohms,1/16W
R9	VRS-CY1JB100J	AA			10 ohms,1/16W
R10	VRS-CY1JB221J	AA			220 ohms,1/16W
R11	VRS-CY1JB273J	AA			27 kohms,1/16W
R12	VRS-CY1JB821J	AA			820 ohms,1/16W
R13	VRS-CY1JB102J	AA			1 kohms,1/16W
R14	VRS-CY1JB223J	AA			22 kohms,1/16W
R15	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R16	VRS-CY1JB563J	AA			56 kohms,1/16W
R17	VRS-CY1JB101J	AA			100 ohms,1/16W
R18	VRS-CY1JB682J	AA			6.8 kohms,1/16W
R19	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R20	VRS-CY1JB102J	AA			1 kohms,1/16W
R21	VRS-CY1JB103J	AA			10 kohms,1/16W
R22	VRS-CY1JB682J	AA			6.8 kohms,1/16W
R23	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R24	VRS-CY1JB102J	AA			1 kohms,1/16W
R25	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R26	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green (Main PCB)
R26	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green (Servo PCB)
R27	VRS-CY1JB153J	AA			15 kohms,1/16W
R28	VRS-CY1JB103J	AA			10 kohms,1/16W
R29	VRS-CY1JB271J	AA			270 ohms,1/16W
R30	VRS-CY1JB101J	AA			100 ohms,1/16W
R31	VRS-CY1JB103J	AA			10 kohms,1/16W
R32	VRS-CY1JB473J	AA			47 kohms,1/16W
R33	VRS-CY1JB154J	AA			150 kohms,1/16W
R34	VRS-CY1JB473J	AA			47 kohms,1/16W
R35	VRS-CY1JB102J	AA			1 kohms,1/16W
R36	VRS-CY1JB562J	AA			5.6 kohms,1/16W
R37	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R38	VRS-CY1JB101J	AA			100 ohms,1/16W
R39	VRS-CY1JB562J	AA			5.6 kohms,1/16W
R40	VRS-CY1JB392J	AA			3.9 kohms,1/16W
R42	VRS-CY1JB123J	AA			12 kohms,1/16W
R43	VRD-TW2EE1R0J	AA			1 kohms,1/4W
R44	VRS-CY1JB272J	AA			2.7 kohms,1/16W
R45	VRD-TW2EE000J	AB			0 ohms,Jumper
R46	VRS-CY1JB272J	AA			2.7 kohms,1/16W
R47	VRS-CY1JB101J	AA			100 ohms,1/16W
R48	VRS-CY1JB105J	AA			1 Mohms,1/16W
R49	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R50	VRS-CY1JB101J	AA			100 ohms,1/16W
R51	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R52	VRS-CY1JB101J	AA			100 ohms,1/16W
R53	VRS-CY1JB101J	AA			100 ohms,1/16W
R55	VRS-CY1JB102J	AA			1 kohms,1/16W
R56	VRS-CY1JB102J	AA			1 kohms,1/16W
R58	VRS-CY1JB102J	AA			1 kohms,1/16W
R59	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R60	VRS-CY1JB103J	AA			10 kohms,1/16W
R61	VRS-CY1JB102J	AA			1 kohms,1/16W
R63	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R64	VRS-CY1JB153J	AA			15 kohms,1/16W
R65	VRS-CY1JB153J	AA			15 kohms,1/16W
R66	VRS-CY1JB102J	AA			1 kohms,1/16W
R67	VRS-CY1JB103J	AA			10 kohms,1/16W
R68	VRD-TW2EE1R0J	AA			1 kohms,1/4W
R69	VRS-CY1JB3R9J	AA			3.9 ohms,1/16W
R70	VRS-CY1JB3R9J	AA			3.9 ohms,1/16W
R71	VRS-CY1JB225J	AA			2.2 Mohms,1/16W
R72	VRS-CY1JB105J	AA			1 Mohms,1/16W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] RESISTORS					
R73	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R74	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R75	VRS-CY1JB221J	AA			220 ohms,1/16W
R76	VRS-CY1JB103J	AA			10 kohms,1/16W
R77	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R78	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R79	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R80	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R81	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R82	VRS-CY1JB102J	AA			1 kohms,1/16W
R83	VRS-CY1JB103J	AA			10 kohms,1/16W
R84	VRS-CY1JB103J	AA			10 kohms,1/16W
R85	VRS-CY1JB103J	AA			10 kohms,1/16W
R86	VRS-CY1JB103J	AA			10 kohms,1/16W
R87	VRS-CY1JB102J	AA			1 kohms,1/16W
R88	VRS-CY1JB152J	AA			1.5 kohms,1/16W
R89	VRS-CY1JB101J	AA			100 ohms,1/16W
R90	VRS-CY1JB123J	AA			12 kohms,1/16W
R91	VRS-CY1JB102J	AA			1 kohms,1/16W
R92	VRS-CY1JB102J	AA			1 kohms,1/16W
R93	VRS-CY1JB102J	AA			1 kohms,1/16W
R94	VRS-CY1JB102J	AA			1 kohms,1/16W
R95	VRS-CY1JB102J	AA			1 kohms,1/16W
R96	VRS-CY1JB102J	AA			1 kohms,1/16W
R97	VRS-CY1JB102J	AA			1 kohms,1/16W
R98	VRS-CY1JB102J	AA			1 kohms,1/16W
R99	VRS-CY1JB102J	AA			1 kohms,1/16W
R100	VRS-CY1JB102J	AA			1 kohms,1/16W
R101	VRS-CY1JB102J	AA			1 kohms,1/16W
R102	VRS-CY1JB102J	AA			1 kohms,1/16W
R103	VRS-CY1JB102J	AA			1 kohms,1/16W
R104	VRS-CY1JB102J	AA			1 kohms,1/16W
R105	VRS-CY1JB102J	AA			1 kohms,1/16W
R106	VRS-CY1JB271J	AA			270 ohms,1/16W
R107	VRS-CY1JB271J	AA			270 ohms,1/16W
R108	VRS-CY1JB102J	AA			1 kohms,1/16W
R110	VRS-CY1JB103J	AA			10 kohms,1/16W
R111	VRS-CY1JB103J	AA			10 kohms,1/16W
R112	VRS-CY1JB103J	AA			10 kohms,1/16W
R113	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R114	VRS-CY1JB332J	AA			3.3 kohms,1/16W
R115	VRS-CY1JB103J	AA			10 kohms,1/16W
R116	VRS-CY1JB471J	AA			470 ohms,1/16W
R117	VRS-TV2AB000J	AA			0 ohms,1/10W
R118	VRS-CY1JB102J	AA			1 kohms,1/16W
R119	VRS-CY1JB102J	AA			1 kohms,1/16W
R120	VRS-CY1JB103J	AA			10 kohms,1/16W
R601	VRS-CY1JB102J	AA			1 kohms,1/6W
R602	VRS-CY1JB102J	AA			1 kohms,1/6W
R603	VRS-CY1JB102J	AA			1 kohms,1/6W
R606	VRS-CY1JB332J	AA			3.3 kohms,1/16W
R607	VRS-CY1JB332J	AA			3.3 kohms,1/16W
R608	VRS-CY1JB122J	AA			1.2 kohms,1/16W
R609	VRS-CY1JB122J	AA			1.2 kohms,1/16W
R614	VRS-CY1JB272J	AA			2.7 kohms,1/16W
R615	VRS-CY1JB272J	AA			2.7 kohms,1/16W
R616	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R617	VRS-CY1JB222J	AA			2.2 kohms,1/16W
R618	VRD-ST2CD331J	AA			330 ohms,1/6W
R619	VRD-ST2CD331J	AA			330 ohms,1/6W
R620	VRS-CY1JB223J	AA			22 kohms,1/16W
R623	VRS-CY1JB682J	AA			6.8 kohms,1/16W
R625	VRS-CY1JB682J	AA			6.8 kohms,1/16W
R626	VRS-CY1JB474J	AA			470 ohms,1/16W
R627	VRS-CY1JB104J	AA			100 kohms,1/16W
R641	VRD-ST2CD333J	AA			33 kohms,1/6W
R642	VRD-ST2CD333J	AA			33 kohms,1/6W
R643	VRS-CY1JB392J	AA			3.9 kohms,1/16W
R644	VRS-CY1JB392J	AA			3.9 kohms,1/16W
R645	VRD-ST2CD682J	AA			6.8 kohms,1/6W
R646	VRD-ST2CD682J	AA			6.8 kohms,1/6W
R651	VRD-ST2CD222J	AA			2.2 kohms,1/6W
R652	VRD-ST2CD222J	AA			2.2 kohms,1/6W
R653	VRS-CY1JB392J	AA			3.9 kohms,1/16W
R654	VRS-CY1JB392J	AA			3.9 kohms,1/16W
R655	VRD-ST2CD223J	AA			22 kohms,1/6W
R671	VRD-ST2CD103J	AA			10 kohms,1/6W
R690	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R691	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R692	VRS-CY1JB393J	AA			39 kohms,1/16W
R693	VRS-CY1JB393J	AA			39 kohms,1/16W
R701	VRD-ST2CD102J	AA			1 kohms,1/6W
R702	VRD-ST2CD102J	AA			1 kohms,1/6W
R706	VRS-CY1JB102J	AA			1 kohms,1/16W
R707	VRS-CY1JB681J	AA			680 ohms,1/16W

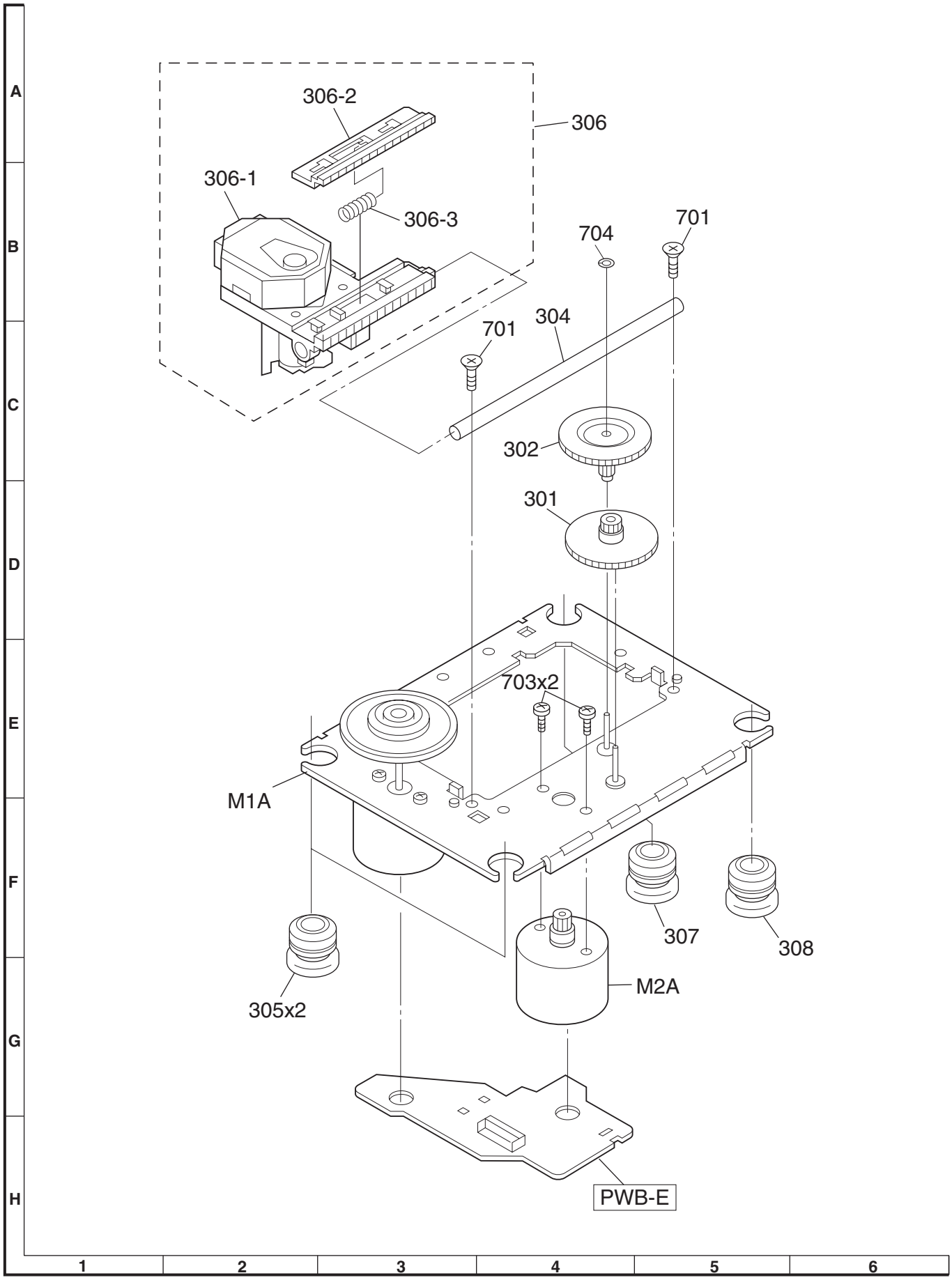
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] RESISTORS					
R708	VRS-CY1JB102J	AA			1 kohms,1/16W
R709	VRD-ST2CD102J	AA			1 kohms,1/6W
R711	VRS-CY1JB000J	AA			0 ohms,Jumper,0.8x1.55mm,Green
R712	VRS-CY1JB102J	AA			1 kohms,1/16W
R713	VRS-CY1JB102J	AA			1 kohms,1/16W
R717	VRS-CY1JB103J	AA			10 kohms,1/16W
R718	VRD-ST2CD102J	AA			1 kohms,1/6W
R719	VRS-CY1JB101J	AA			100 ohms,1/16W
R720	VRS-CY1JB102J	AA			1 kohms,1/16W
R722	VRS-CY1JB103J	AA			10 kohms,1/16W
R724	VRS-CY1JB223J	AA			22 kohms,1/16W
R728	VRD-ST2CD102J	AA			1 kohms,1/6W
R729	VRD-ST2CD271J	AA			270 ohms,1/6W
R730	VRD-ST2CD271J	AA			270 ohms,1/6W
R731	VRS-CY1JB221J	AA			220 ohms,1/16W
R732	VRS-CY1JB102J	AA			1 kohms,1/16W
R733	VRS-CY1JB102J	AA			1 kohms,1/16W
R734	VRS-CY1JB102J	AA			1 kohms,1/16W
R735	VRS-CY1JB102J	AA			1 kohms,1/16W
R736	VRS-CY1JB102J	AA			1 kohms,1/16W
R737	VRS-CY1JB102J	AA			1 kohms,1/16W
R738	VRS-CY1JB102J	AA			1 kohms,1/16W
R741	VRS-CY1JB102J	AA			1 kohms,1/6W
R744	VRS-CY1JB103J	AA			10 kohms,1/16W
R745	VRS-CY1JB102J	AA			1 kohms,1/16W
R746	VRD-ST2CD473J	AA			47 kohms,1/6W
R751	VRS-CY1JB102J	AA			1 kohms,1/16W
R752	VRD-ST2CD102J	AA			1 kohms,1/6W (DISPLAY PCB)
R752	VRD-ST2EE181J	AA			180 ohms,1/4W (LED PCB)
R753	VRD-ST2CD103J	AA			10 kohms,1/6W
R754	VRD-ST2CD103J	AA			10 kohms,1/6W
R755	VRD-ST2CD102J	AA			1 kohms,1/6W
R756	VRD-ST2CD102J	AA			1 kohms,1/6W
R757	VRD-ST2CD102J	AA			1 kohms,1/6W
R758	VRD-ST2CD102J	AA			1 kohms,1/6W
R759	VRD-ST2CD102J	AA			1 kohms,1/6W
R760	VRD-ST2CD102J	AA			1 kohms,1/6W
R761	VRD-ST2CD102J	AA			1 kohms,1/6W
R763	VRD-ST2EE181J	AA			150 ohms,1/4W
R764	VRS-CY1JB103J	AA			10 kohms,1/16W
R765	VRS-CY1JB102J	AA			1 kohms,1/16W
R766	VRD-ST2CD102J	AA			1 kohms,1/6W
R767	VRS-CY1JB102J	AA			1 kohms,1/16W
R768	VRS-CY1JB102J	AA			1 kohms,1/16W
R770	VRS-CY1JB102J	AA			1 kohms,1/16W
R771	VRS-CY1JB102J	AA			1 kohms,1/16W
R772	VRS-CY1JB102J	AA			1 kohms,1/16W
R773	VRS-CY1JB103J	AA			10 kohms,1/16W
R775	VRS-CY1JB102J	AA			1 kohms,1/16W
R776	VRS-CY1JB102J	AA			1 kohms,1/16W
R777	VRS-CY1JB102J	AA			1 kohms,1/16W
R778	VRS-CY1JB102J	AA			1 kohms,1/16W
R779	VRS-CY1JB102J	AA			1 kohms,1/16W
R780	VRS-CY1JB102J	AA			1 kohms,1/16W
R781	VRD-ST2CD102J	AA			1 kohms,1/6W
R782	VRD-ST2CD102J	AA			1 kohms,1/6W
R783	VRD-ST2CD102J	AA			1 kohms,1/6W
R784	VRD-ST2CD102J	AA			1 kohms,1/6W
R785	VRS-CY1JB102J	AA			1 kohms,1/16W
R786	VRS-CY1JB102J	AA			1 kohms,1/16W
R787	VRS-CY1JB102J	AA			1 kohms,1/16W
R788	VRD-ST2CD102J	AA			1 kohms,1/6W
R789	VRD-ST2CD102J	AA			1 kohms,1/6W
R790	VRD-ST2CD102J	AA			1 kohms,1/6W
R791	VRD-ST2CD102J	AA			1 kohms,1/6W
R792	VRD-ST2CD102J	AA			1 kohms,1/6W
R793	VRD-ST2CD102J	AA			1 kohms,1/6W
R794	VRD-ST2CD102J	AA			1 kohms,1/6W
R795	VRS-CY1JB102J	AA			1 kohms,1/16W
R797	VRD-ST2CD102J	AA			1 kohms,1/6W
R801	VRD-ST2CD104J	AA			100 kohms,1/6W
R802	VRD-ST2CD473J	AA			47 kohms,1/6W
R803	VRD-ST2CD123J	AA			12 kohms,1/6W
R804	VRD-ST2EE470J	AA			47 ohms,1/4W
R805	VRD-ST2EE470J	AA			47 ohms,1/4W
R806	VRD-ST2CD473J	AA			47 kohms,1/6W
R807	VRD-ST2EE101J	AA			100 ohms,1/4W
R808	VRD-RT2HD222J	AA			2.2 kohms,1/2W
R841	VRD-ST2CD224J	AA			220 kohms,1/6W
R842	VRD-ST2CD102J	AA			1 kohms,1/6W
R843	VRD-ST2CD473J	AA			47 kohms,1/6W
R844	VRD-ST2EE820J	AA			82 ohms,1/4W
R853	VRD-ST2CD223J	AA			22 kohms,1/6W
R854	VRD-ST2CD332J	AA			3.3 kohms,1/6W
R857	VRS-CY1JB100J	AA			10 ohms,1/16W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] RESISTORS					
R858	VRD-ST2CD221J	AA			220 ohms,1/6W
R859	VRS-CY1JB331J	AA			330 ohms,1/16W
R863	VRD-RT2HD3R3J	AA			3.3 ohms,1/2W
R864	VRD-ST2CD223J	AA			22 kohms,1/6W
R890	RR-HZ0001AWZZ	AE			4.7 Mohms,1/2W
R901	VRS-CY1JB563J	AA			56 kohms,1/16W
R902	VRS-CY1JB563J	AA			56 kohms,1/16W
R903	VRS-CY1JB102J	AA			1 kohms,1/16W
R904	VRS-CY1JB102J	AA			1 kohms,1/16W
R905	VRS-CY1JB561J	AA			560 ohms,1/16W
R906	VRS-CY1JB561J	AA			560 ohms,1/16W
R907	VRS-CY1JB563J	AA			56 kohms,1/16W
R908	VRS-CY1JB102J	AA			1 kohms,1/16W
R909	VRS-CY1JB333J	AA			33 kohms,1/16W
R910	VRS-CY1JB102J	AA			1 kohms,1/16W
R911	VRS-CY1JB563J	AA			56 kohms,1/16W
⚠ R912	VRG-ST2EC101J	AB			100 ohms,1/4W,Fusible
R913	VRN-VV3LAR22J	AC			0.22 kohms,3W
R916	VRN-VV3LAR22J	AC			0.22 kohms,3W
R917	VRN-VV3LAR10J	AD			0.1 kohms,3W
R918	VRS-CY1JB152J	AA			1.5 kohms,1/16W
R919	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R920	VRS-CY1JB472J	AA			4.7 kohms,1/16W
R921	VRS-CY1JB152J	AA			1.5 kohms,1/16W
R922	VRN-VV3LAR10J	AD			0.1 kohms,3W
R925	VRD-RT2HD152J	AA			1.5 kohms,1/2W
R926	VRD-RT2HD152J	AA			1.5 kohms,1/2W
R927	VRD-ST2EE393J	AA			39 kohms,1/4W
R928	VRD-ST2EE393J	AA			39 kohms,1/4W
R929	VRD-ST2EE473J	AA			47 kohms,1/4W
R930	VRD-ST2EE473J	AA			47 kohms,1/4W
R934	VRD-ST2CD563J	AA			56 kohms,1/6W
R935	VRD-ST2CD563J	AA			56 kohms,1/6W
R937	VRS-CY1JB563J	AA			56 kohms,1/16W
R938	VRD-RT2HD100J	AA			10 ohms,1/2W
R939	VRD-RT2HD100J	AA			10 ohms,1/2W
R940	VRD-RT2HD100J	AA			10 ohms,1/2W
R941	VRD-RT2HD100J	AA			10 ohms,1/2W
R942	VRN-VV3DA391J	AC			390 ohms,2W
R943	VRN-VV3DA391J	AC			390 ohms,2W
R944	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R945	VRD-ST2CD152J	AA			1.5 kohms,1/6W
R946	VRS-CY1JB473J	AA			47 kohms,1/16W
R947	VRS-CY1JB153J	AA			15 kohms,1/16W
R949	VRS-CY1JB102J	AA			1 kohms,1/16W
R950	VRS-CY1JB683J	AA			68 kohms,1/16W
R952	VRD-ST2EE6R8J	AA			6.8 ohms,1/4W
R953	VRD-ST2EE6R8J	AA			6.8 ohms,1/4W
R956	VRD-ST2CD102J	AA			1 kohms,1/6W
⚠ R958	VRG-ST2EC101J	AB			100 ohms,1/4W,Fusible
R961	VRS-CY1JB183J	AA			18 kohms,1/16W
R962	VRS-CY1JB821J	AA			820 ohms,1/16W
R965	VRD-RT2HD822J	AA			8.2 kohms,1/2W
R966	VRD-RT2HD822J	AA			8.2 kohms,1/2W
R968	VRD-RT2HD391J	AA			390 ohms,1/2W
R969	VRS-CY1JB473J	AA			47 kohms,1/16W
R970	VRS-CY1JB473J	AA			47 kohms,1/16W
R971	VRS-CY1JB223J	AA			22 kohms,1/16W
R972	VRS-CY1JB223J	AA			22 kohms,1/16W
R973	VRS-CY1JB821J	AA			820 ohms,1/16W
RD01	VRS-CY1JB182J	AA			1.8 kohms,1/16W
RD02	VRS-CY1JB222J	AA			2.2 kohms,1/16W
RD03	VRS-CY1JB332J	AA			3.3 kohms,1/16W
RD04	VRS-CY1JB562J	AA			5.6 kohms,1/16W
RD05	VRS-CY1JB104J	AA			100 kohms,1/16W
RD06	VRS-CY1JB182J	AA			1.8 kohms,1/16W
RD07	VRS-CY1JB222J	AA			2.2 kohms,1/16W
RD08	VRS-CY1JB182J	AA			1.8 kohms,1/16W
RD09	VRS-CY1JB222J	AA			2.2 kohms,1/16W
RP740	VRS-CY1JB103J	AA			10 kohms,1/16W
RP741	VRS-CY1JB103J	AA			10 kohms,1/16W
RP743	VRS-CY1JB224J	AA			220 kohms,1/16W
RP745	VRS-CY1JB272J	AA			2.7 kohms,1/16W
RP746	VRS-CY1JB272J	AA			2.7 kohms,1/16W
RP747	VRS-CY1JB102J	AA			1 kohms,1/16W
RP748	VRS-CY1JB102J	AA			1 kohms,1/16W
RP749	VRS-CY1JB102J	AA			1 kohms,1/16W
RP750	VRS-CY1JB102J	AA			1 kohms,1/16W
RP752	VRD-ST2EE1R5J	AA			1.5 ohms,1/4W
RP753	VRD-ST2EE1R5J	AA			1.5 ohms,1/4W
RP755	VRS-CY1JB103J	AA			10 kohms,1/16W
RP757	VRS-CY1JB104J	AA			100 kohms,1/16W
RP758	VRS-CY1JB224J	AA			220 kohms,1/16W
RP761	VRS-CY1JB472J	AA			4.7 kohms,1/16W
RP762	VRD-ST2CD103J	AA			10 kohms,1/6W

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[8] RESISTORS					
RP763	VRS-CY1JB151J	AA			150 ohms,1/16W
RP765	VRS-CY1JB472J	AA			4.7 kohms,1/16W
RP767	VRD-ST2CD331J	AA			330 ohms,1/6W
RP768	VRS-CY1JB333J	AA			33 kohms,1/16W
R974	VRS-CY1JB102J	AA			33 kohms,1/16W
RP770	VRS-CY1JB272J	AA			1 kohms,1/16W
RP771	VRS-CY1JB272J	AA			2.7 kohms,1/16W
RP772	VRS-CY1JB272J	AA			2.7 kohms,1/16W
RP773	VRS-CY1JB272J	AA			2.7 kohms,1/16W
RP774	VRS-CY1JB103J	AA			10 kohms,1/16W
RP775	VRS-CY1JB273J	AA			27 kohms,1/16W
RP776	VRS-CY1JB103J	AA			10 kohms,1/16W
RP777	VRD-ST2CD103J	AA			10 kohms,1/6W
RS01	VRS-CY1JB103J	AA			10 kohms,1/16W
RS02	VRS-CY1JB103J	AA			10 kohms,1/16W
RS03	VRS-CY1JB103J	AA			10 kohms,1/16W
RS05	VRS-CY1JB473J	AA			47 kohms,1/16W
RS07	VRS-CY1JB102J	AA			1 kohms,1/16W
RS09	VRS-CY1JB102J	AA			1 kohms,1/16W
RS11	VRD-ST2CD471J	AA			470 kohms,1/6W
RS15	VRS-CY1JB473J	AA			47 kohms,1/16W
RS16	VRS-CY1JB473J	AA			47 kohms,1/16W
RS17	VRS-CY1JB104J	AA			100 kohms,1/16W
RS18	VRS-CY1JB104J	AA			100 kohms,1/16W
RS19	VRS-CY1JB123J	AA			12 kohms,1/16W
RS20	VRS-CY1JB123J	AA			12 kohms,1/16W
RS21	VRS-CY1JB103J	AA			10 kohms,1/16W
RS22	VRS-CY1JB103J	AA			10 kohms,1/16W
RS24	VRS-CY1JB472J	AA			4.7 kohms,1/16W
RS25	VRS-CY1JB333J	AA			33 kohms,1/16W
RS27	VRS-CY1JB122J	AA			1.2 kohms,1/16W
RS29	VRS-CY1JB473J	AA			47 kohms,1/16W
RS35	VRD-ST2CD103J	AA			10 kohms,1/6W
[9] OTHER CIRCUITRY PARTS					
BI1	QCNWNA587AWPZ	AG			Connector Ass'y,9/10Pin
BI701	QCNWNA056AWPZ	AF			Connector Ass'y,6/7Pin
BI702	QCNWN2750AWPZ	AG			Connector Ass'y,8/9Pin
BI703	QCNWN2505AWZZ	AC			Flat Wire
BI801	QCNWNA358AWPZ	AK			Connector Ass'y,11/10Pin,with CNS801
BI902	QCNWNA551AWPZ	AF			Connector Ass'y,4/5Pin
CNP1	QCNCWYP16AWZZ	AD			Socket,16Pin
CNP2	92LCONE4P53253	AB			Plug,4Pin
CNP3	QCNCWZX11AWZZ	AC			Socket,11Pin
CNP4	QCNCWZY11AWZZ	AC			Socket,11Pin
CNP5	QCNCWZY20AWZZ	AG			Socket,20Pin
CNP6	QCNCWYP30AWZZ	AE			Socket,30Pin
CNP301	QCNCWZX11AWZZ	AC			Socket,11Pin
CNP301W	QCNWN2525AWZZ	AC			FFC Cable,11 Pin
CNP601	92LCONE9P53253	AC			Plug,9Pin
CNP702	QCNCWZY20AWZZ	AG			Socket,20Pin
CNP703	92LCONE2P53253	AB			Plug,2Pin
CNP705	QCNCWZY11AWZZ	AC			Socket,11Pin
CNP706	QCNCM705DAFZZ	AB			Plug,4Pin
CNP707	QCNCM704BAFZZ	AA			Plug,2Pin
CNP708	QCNCW012EAWZZ	AC			Socket,5Pin
CNP701A	QCNCWZX16AWZZ	AD			Socket,16Pin
CNP701B	QCNCWZX16AWZZ	AD			Socket,16Pin
CNP801	QCNCM035KAWZZ	AB			Plug,4Pin
CNP802	92LCONE6P53253	AC			Plug,6Pin
⚠ CNP805	QCNCM049BAWZZ	AC			Plug,2Pin
CNP902	QCNCM035DAWZZ	AB			Plug,4Pin
CNP971	92LCONE2P53253	AB			Plug,2Pin
CNPU1	QCNCWYP30AWZZ	AE			Socket,30Pin
CNPU2	92LCONEEP53254	AD			Plug,14Pin
CNPU3	92LCONEFP53254	AD			Plug,15Pin
CNS01	QCNCM704BAFZZ	AA			Plug,2Pin
CNS02	QCNCM704BAFZZ	AA			Plug,2Pin
CON / WIRE	QCNWNA057AWPZ	AC			Connector Ass'y,2 Pin
CON / WIRE	QCNWNA552AWPZ	AE			Connector Ass'y,16 Pin
CON / WIRE	QCNWNA556AWPZ	AE			Connector Ass'y,20 Pin
CON / WIRE	QCNWNA557AWPZ	AE			Connector Ass'y,11 Pin
CON / WIRE	QCNWNA558AWPZ	AF			Connector Ass'y,4 Pin
CONNECTOR	QCNCWZO11AWZZ	AC			Socket,11Pin
⚠ F801	QFS-D402BSJNI	AB			Fuse,4A,125V
⚠ F802	QFS-D402BSJNI	AB			Fuse,4A,125V
⚠ F803	QFS-D202BSJNI	AB			Fuse,2A,125V
⚠ F804	QFS-D202BSJNI	AB			Fuse,2A,125V
⚠ F805	QFS-D402BSJNI	AB			Fuse,4A,125V
FFC	QCNWN2701AWPZ	AD			Flat Cable,11Pin
FFC	QCNWNA606AWPZ	AG			Connector Ass'y,
FFC	QCNWNA619AWPZ	AD			Flat Cable
⚠ FH801	92LFSHOLD1652T	AB			Fuse Holder
⚠ FH802	92LFSHOLD1652T	AB			Fuse Holder

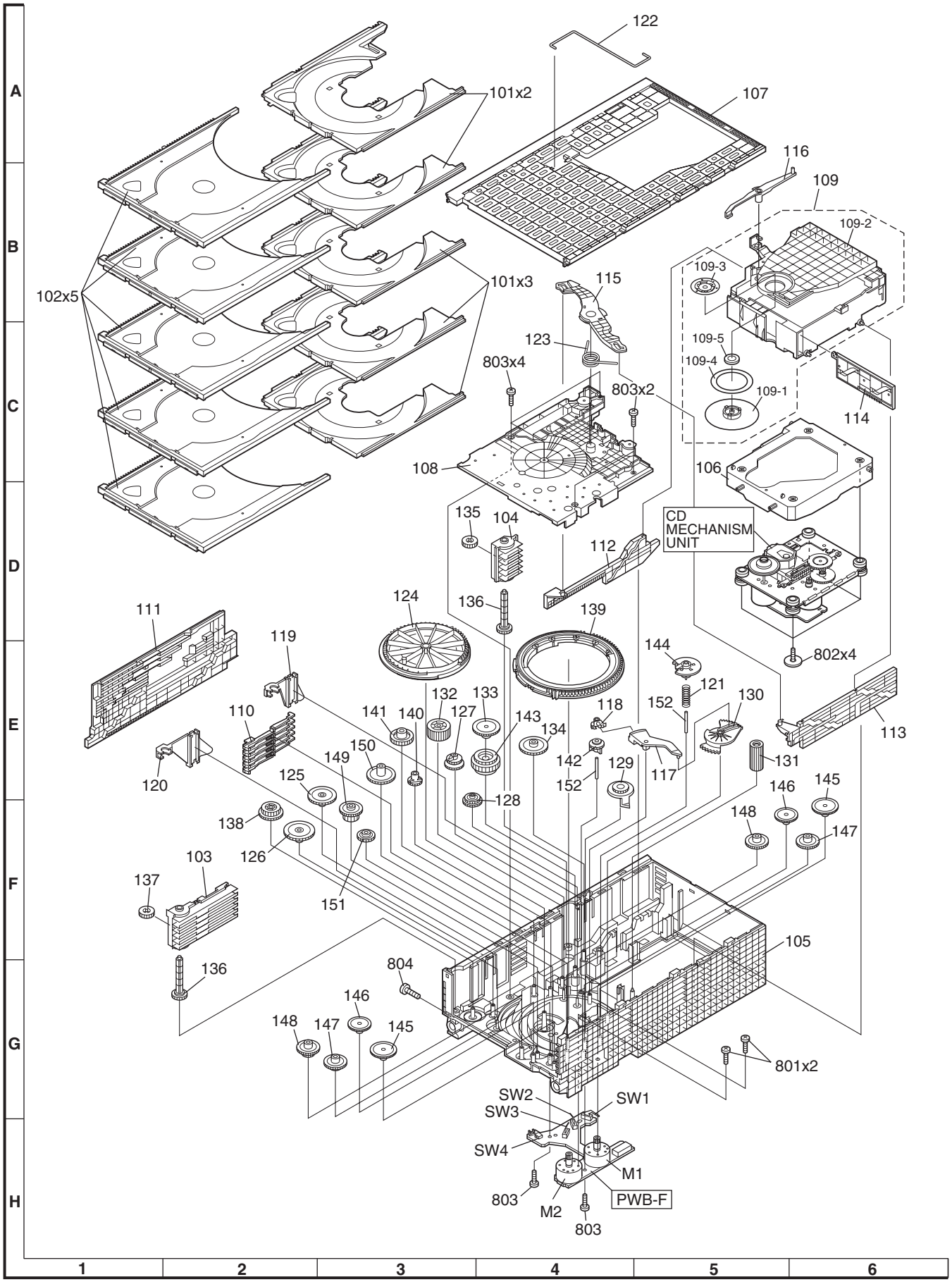
	NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
	[9] OTHER CIRCUITRY PARTS					
⚠	FH803	92LFSHOLD1652T	AB			Fuse Holder
⚠	FH804	92LFSHOLD1652T	AB			Fuse Holder
⚠	FH805	92LFSHOLD1652T	AB			Fuse Holder
⚠	FH806	92LFSHOLD1652T	AB			Fuse Holder
⚠	FH807	92LFSHOLD1652T	AB			Fuse Holder
⚠	FH808	92LFSHOLD1652T	AB			Fuse Holder
⚠	FH809	92LFSHOLD1652T	AB			Fuse Holder
⚠	FH810	92LFSHOLD1652T	AB			Fuse Holder
	FL701	VVKNA12MM54-1	AU			FL Display
	FW901	QCNWNA277AWPZ	AC			Flat Wire,5 Pin
	JK690	QSOCJ0224AWZZ	AC			Jack,Video/AUX
	JK701	QJAKM0004AWZZ	AK			Jack,Headphones
	JK702	QSOCZA008AWZZ	AF			Jack,USB
	JK953	QSOCJA010AWZZ	AC			Sub Woofer Output
	LG2	QLUGP0001AWZZ	AC			Lug
	LG3	QLUGP0001AWZZ	AC			Lug
	LG4	QLUGP0001AWZZ	AC			Lug
	LG5	QLUGP0001AWZZ	AC			Lug
⚠	RL841	RRLYDA002AWZZ	AF			Relay,Power
	RL914	RRLYD0016AWZZ	AH			Relay,Speaker
	RX701	VHLK2013TH2E1	AG			Remote Sensor,2013TH2E1
	SO901	QTANA0423AWZZ	AE			Terminal,Speaker
	SW701	92LSWICHT1663T	AC			Switch,Key Type [DISC 4]
	SW702	92LSWICHT1663T	AC			Switch,Key Type [DISC 5]
	SW703	92LSWICHT1663T	AC			Switch,Key Type [OPEN/CLOSE]
	SW704	92LSWICHT1663T	AC			Switch,Key Type [DISC 1]
	SW705	92LSWICHT1663T	AC			Switch,Key Type [DISC 2]
	SW706	92LSWICHT1663T	AC			Switch,Key Type [DISC 3]
	SW707	92LSWICHT1663T	AC			Switch,Key Type [POWER ON/STAND-BY]
	SW708	92LSWICHT1663T	AC			Switch,Key Type [PLAY/PAUSE]
	SW709	92LSWICHT1663T	AC			Switch,Key Type [STOP]
	SW710	92LSWICHT1663T	AC			Switch,Key Type [VIDEO/AUX/USB]
	SW711	92LSWICHT1663T	AC			Switch,Key Type [TUNER (BAND)]
	SW712	92LSWICHT1663T	AC			Switch,Key Type [CD]
	Tuner Pack	RTUNSA007AWZZ	BA			Tuner Pack
	VR701	QSW-ZA001AWZZ	AE			Switch,Push type [Jog]
	WTM901	QCNCW019EAWZZ	AB			Socket,5Pin
	CON/WIRE	QCNWNA309AWPZ	AL			LED Wire
	CON/WIRE	QCNWNA351AWPZ	AK			Connector A'ssy,4Pin
	CON/WIRE	QCNWNA597AWPZ				Speaker Lead Wire
	CON/WIRE	QCNWNA646AWPZ	AD			Lug Wire
	CONNECTOR	92LCONE4P53254	AC			Plug,4Pin
	SW1	QSW-P9003AWZZ	AD			Switch, Push Type [CLAMP]
	SW2	QSW-P9003AWZZ	AD			Switch, Push Type [TRAY1]
	SW3	QSW-P9003AWZZ	AD			Switch, Push Type [TRAY2]
	SW4	QSW-P9006AWZZ	AF			Switch, Push Type [DISC]

[10] CD MECHANISM PARTS



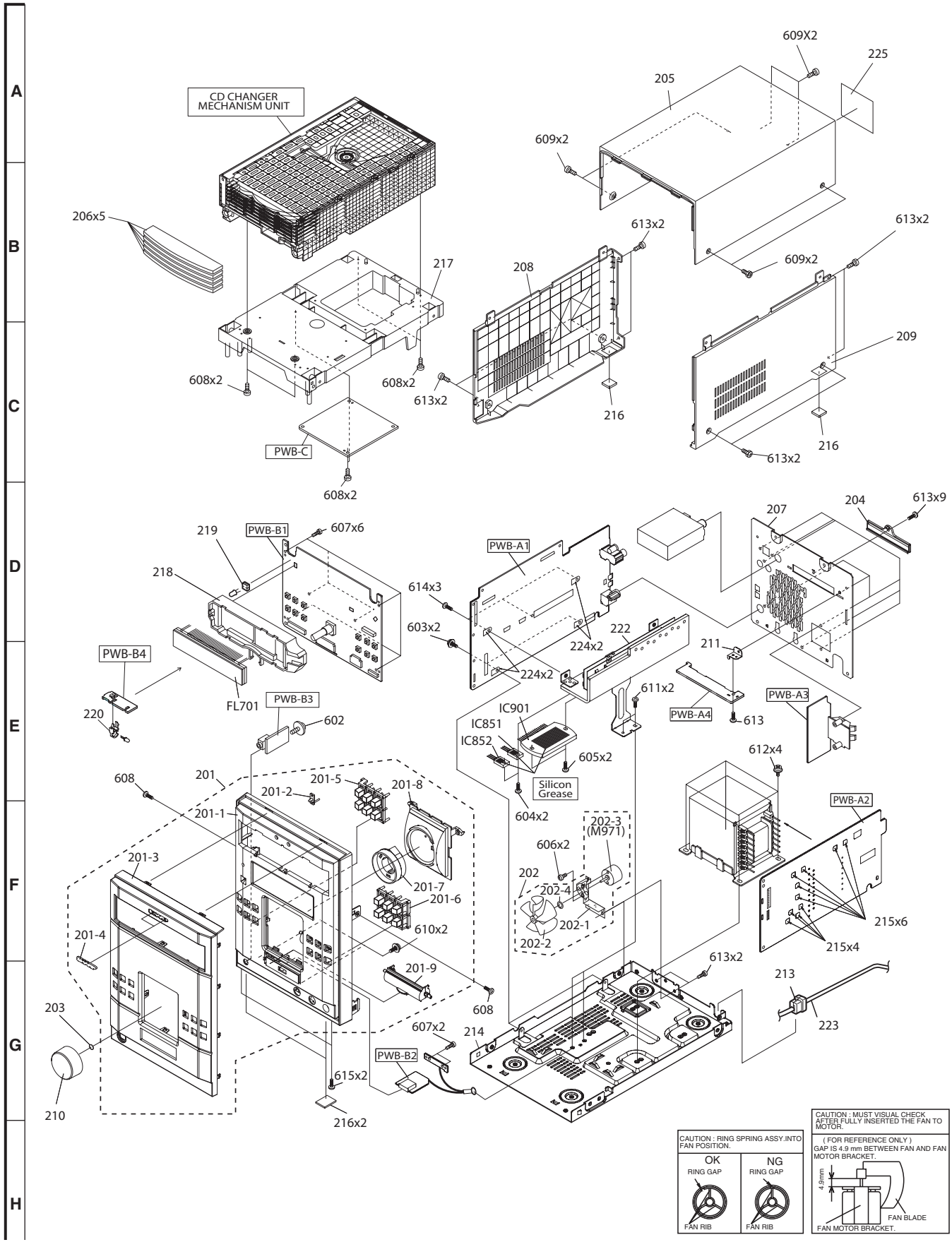
	NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
	[10] CD MECHANISM PARTS					
	301	NGERH0011AWZZ	AC			Gear,Middle
	302	NGERH0012AWZZ	AC			Gear,Drive
	304	NSFTM0020AWFW	AD			Shaft,Guide
	305	92LMCUSN1524A	AD			Cushion
⚠	306	92LHPC1LVASY	AZ			Pickup Unit Ass'y
	306- 1	----------	-			Pickup Unit (Not Replacement Item)
	306- 2	NGERR0043AFZZ	AC			Gear,Rack
	306- 3	MSPRC0961AFZZ	AA			Spring,Rack
	307	PCUSG0001AWSA	AD			Cushion
	308	PCUSG0004AWSA	AD			Cushion
	701	XBSY726P06000	AA			Screw,M2.6x6mm
	703	XBBY720P03000	AA			Screw,M2x3mm
	704	LX-WZ1070AFZZ	AA			Washer,M1.5xM3.8x0.25mm
	M1A	92LMTR6447CASY	AQ			Motor with Chassis [Spindle]
	M2A	92LMTR6447BASY	AN			Motor with Gear [Sled]

[11] CHANGER MECHANISM PARTS



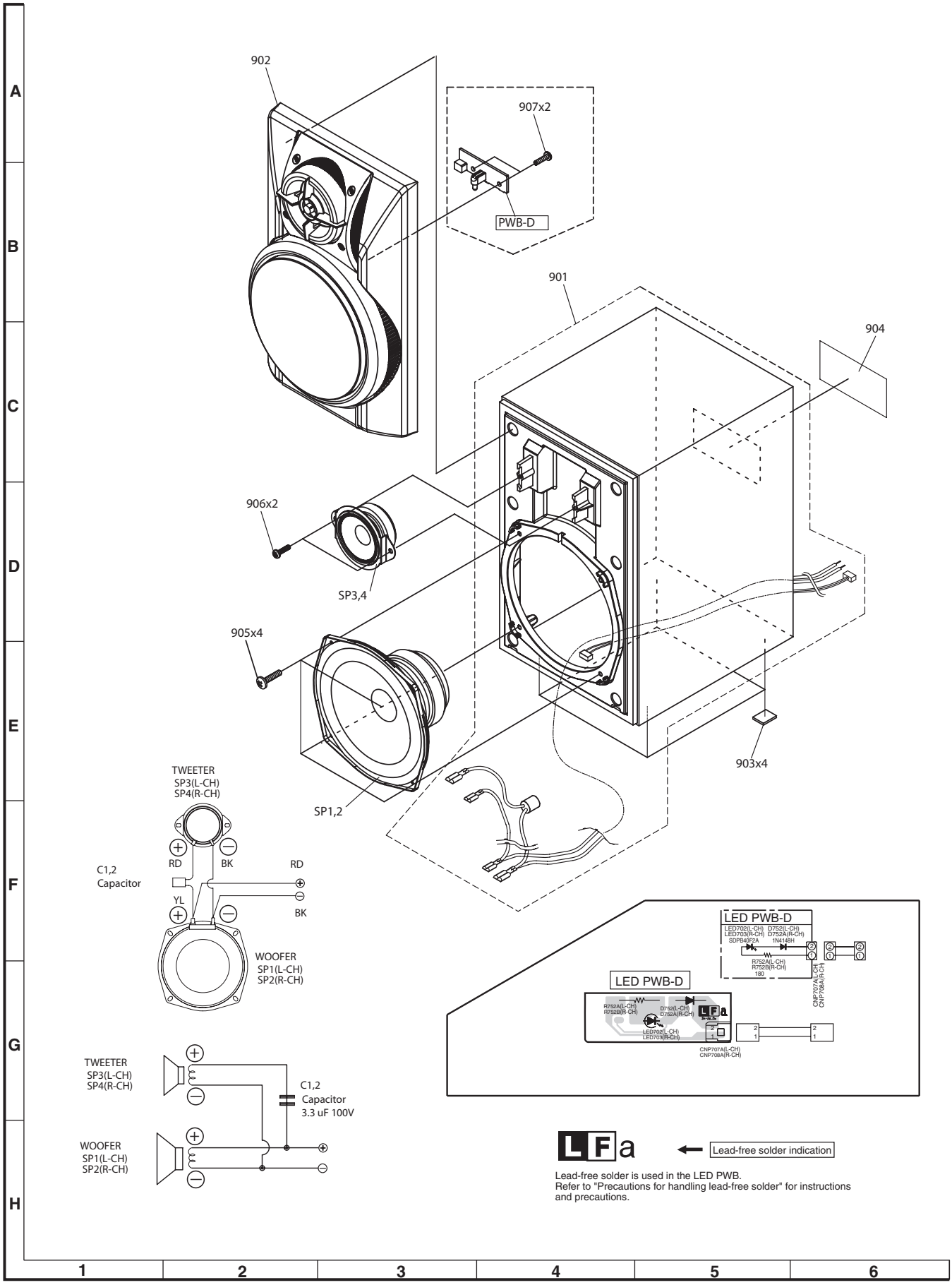
NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[11] CHANGER MECHANISM PARTS					
101	GCOVA1513AWZZ	AF			Disc Tray
102	GCOVA1514AWZZ	AF			Guide Tray
103	LANGG0008AWZZ	AD			Outer Tray Guide
104	LANGG0009AWZZ	AC			Inner Tray Guide
105	LCHSM0194AWZZ	AP			Main Base
106	LHLDZ9017AWZZ	AF			CD Mechanism Holder
107	LPLTP0014AWZZ	AK			Top Plate
108	LPLTP0015AWZZ	AG			Gear Plate
109	MHOLD5529ASY	AP			Up/Down Holder Ass'y
109- 1	LHLDM9001AWZZ	AD			Stabilizer
109- 2	LHLDZ9019AWM1	AK			Up/Down Holder Ass'y
109- 3	LPLTM0017AWZZ	AB			Stabilizer Plate
109- 4	LPLTMA001AWFW	AC			Plate
109- 5	PMAGF0003AWZZ	AF			Magnet
110	MLEVP0129AWZZ	AC			Tray Lock Lever
111	MLEVP0130AWZZ	AG			Gear Up/Down Board
112	MLEVP0131AWZZ	AD			Mechanism Up/Down Board (L)
113	MLEVP0132AWZZ	AD			Mechanism Up/Down Board (R)
114	MLEVP0133AWZZ	AC			Mechanism Clamp Board
115	MLEVP0134AWZZ	AD			L/R Joint Lever
116	MLEVP0135AWZZ	AC			Tray Set Lever
117	MLEVP0136AWZZ	AC			Mechanism Clamp Switch Lever
118	MLEVP0137AWZZ	AC			Mechanism Clamp Switch Arm
119	MLEVP0138AWZZ	AB			Inner Gear Up/Down Lever
120	MLEVP0139AWZZ	AC			Outer Gear Up/Down Lever
121	MSPRC0044AWFJ	AB			Shift Spring
122	MSPRD0191AWFJ	AC			Disc Stop Spring
123	MSPRD0192AWFJ	AB			Balance Spring
124	NGERH0176AWZZ	AF			Tray Big Gear
125	NGERH0177AWZZ	AC			Tray Front Gear A
126	NGERH0178AWZZ	AC			Tray Front Gear B
127	NGERH0179AWZZ	AC			Tray Rear Gear A
128	NGERH0180AWZZ	AB			Tray Rear Gear B
129	NGERH0181AWZZ	AC			Mechanism Clamp Gear A
130	NGERH0182AWZZ	AC			Mechanism Clamp Joint Gear
131	NGERH0183AWZZ	AC			Mechanism Clamp Board Gear
132	NGERH0184AWZZ	AC			Tray Rear Joint Gear A
133	NGERH0185AWZZ	AC			Tray Rear Joint Gear B
134	NGERH0186AWZZ	AC			Tray Rear Joint Gear C
135	NGERH0187AWZZ	AB			Tray Rear Drive Gear
136	NGERH0188AWZZ	AC			Tray Drive Gear
137	NGERH0189AWZZ	AB			Tray Front Drive Gear
138	NGERH0190AWZZ	AC			Tray Front Joint Gear
139	NGERH0191AWZZ	AE			Mode Big Gear
140	NGERH0192AWZZ	AC			G-Up/Down Gear A
141	NGERH0193AWZZ	AC			G-Up/Down Gear B
142	NGERH0194AWZZ	AB			Mechanism Up/Down Gear A
143	NGERH0195AWZZ	AC			Mechanism Up/Down Gear B
144	NGERH0196AWZZ	AC			Mechanism Clamp Switch Gear
145	NGERH0198AWZZ	AB			Reduction Gear A
146	NGERH0199AWZZ	AB			Reduction Gear B
147	NGERH0200AWZZ	AB			Reduction Gear C
148	NGERH0201AWZZ	AB			Reduction Gear D
149	NGERH0202AWZZ	AB			Up/Down Reduction Gear E
150	NGERH0203AWZZ	AB			Up/Down Reduction Gear F
151	NGERH0204AWZZ	AB			Tray Reduction Gear E
152	NSFTT0084AWFD	AD			Shaft,Main Base
801	LX-BZA006AWF7	AB			Screw,Special
802	LX-EZ0005AWF7	AB			Screw,Special
803	XEBY720P08000	AA			Screw,M2x8mm
804	XEBY730P10000	AA			Screw,M3x10mm
M1	92LMTR5529BASY	AD			Motor with Gear [Tray]
M2	92LMTR5529BASY	AD			Motor with Gear [Main Cam]
SW1	QSW-P9003AWZZ	AD			Switch,Push Type [CLAMP]
SW2	QSW-P9003AWZZ	AD			Switch,Push Type [TRAY SW1]
SW3	QSW-P9003AWZZ	AD			Switch,Push Type [TRAY SW2]
SW4	QSW-P9006AWZZ	AF			Switch,Push Type [DISC]

[12] CABINET PARTS



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[12] CABINET PARTS					
201	CCABA6475AW01	AY			Front Panel Ass'y [XL-UH240]
201-1	----------	-			Front Panel
201-2	GCOVA1364AWSA	AB			Indicator, Timer
201-3	HDECQA240AWSA	AM			Panel, FL Display
201-4	HBDGB1001AWSA	AD			Badge, SHARP
201-5	JKNBZA182AWSA	AE			Button, Function, A
201-6	JKNBZA183AWSA	AE			Button, Disc No.
201-7	HDECQA242AWSA	AD			Indicator, Volume Knob
201-8	HDECQA241AWSA	AH			Decoration, Panel
201-9	GDORFA012AWSA	AL			Cover, USB
202	CFANB6475AW01	AN			Fan Motor Ass'y
202-1	LANGK0434AWFW	AF			Bracket, Fan Motor
202-2	NFANP0001AWZZ	AD			Rotary, Fan
202-3	RMOTVA015AWZZ	AH			Motor, Air Cooling Fan (M971)
202-4	92LCSPR1431C	AA			Spring, Ring
203	92LCSPR1431C	AA			Spring, Ring
204	GCOVAA143AWSA	AC			Cover, Servo Flash
205	GCAB-A035AWSA	AS			Top Cabinet
206	GCOVAA137AWSA	AD			Disc Tray Cover
207	GiTARA330AWSA	AL			Rear Panel, [For SEC only]
207	GiTARA338AWSA	AL			Rear Panel, [For SECL only]
208	GiTASA140AWSA	AL			Side Panel, Left
209	GiTASA141AWSA	AL			Side Panel, Right
210	JKNBKA021AWSA	AM			Knob, VOLUME
211	LANGT0042AWFW	AC			Bracket, PWB Support
212	LBND-1011AWZZ	AA			Nylon Band
⚠ 213	LBSHC0005AWZZ	AD			Bushing, AC Power Supply Cord
214	LCHSMA041AWFW	AQ			Chassis, Main
⚠ 215	92LFSHOLD1652T	AB			Holder, Fuse
216	PCUSG0022AWZZ	AB			Cushion, Leg
217	LCHSZA010AWZZ	AN			Chassis, Changer Unit
218	LHLDZ9024AWZZ	AD			Holder, FL Display
219	LHLDZA047AWZZ	AC			Holder, LED
220	LHLDZA122AWZZ	AC			Holder, LED
221	92LNBAND1318A	AA			Nylon Band, 80mm
222	PRDARA105AWFW	AT			Heat Sink, Main
⚠ 223	QACCD0032AWZZ	AL			AC Power Supply Cord
224	QLUGPA001AWZZ	AC			Lug (LG2-5)
225	TSPC-A561AWZZ	AD			Label, Specification [for SEC]
225	TSPC-A565AWZZ	AD			Label, Specification [for SECL]
602	LX-EZ0005AWF7	AB			Screw, Special
603	LX-JZ0010AFF7	AB			Screw, M3 X10mm
604	LX-JZ0036AWF7	AC			Screw, Special
605	LX-JZ0037AWF7	AC			Screw, Special
606	XBBY720P04000	AA			Screw, M2 X4mm
607	XEBY726P10000	AA			Screw, M2.6 X10mm
608	XEBY730P10000	AA			Screw, M3 X10mm
609	XEBY730P12000	AA			Screw, M3 X12mm
610	LX-JZA019AWF7	AB			Screw, Special
611	XHBY730P06000	AB			Screw, M3 X6mm
612	XHBY740P06000	AB			Screw, M4 X6mm
613	XJBY730P10000	AA			Screw, M3 X10mm
614	XJBY830P08000	AB			Screw, M3 X8mm
615	XJSY730P10000	AA			Screw, M3 X10mm

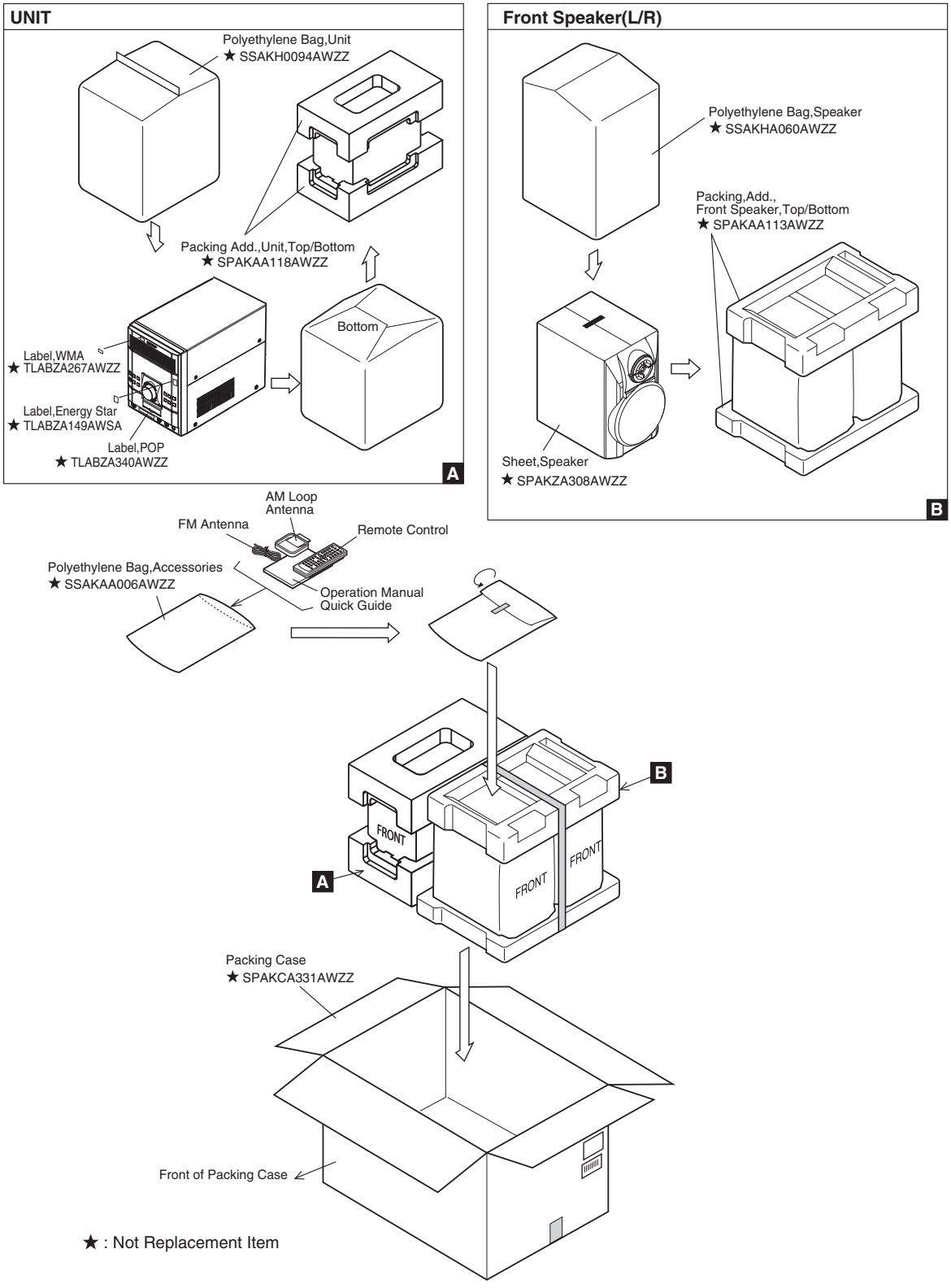
[13] SPEAKER BOX PARTS



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[13] SPEAKER BOX PARTS					
901	GBOXSA120AW01	BG			Wooden Box Ass'y
902	CPNLSA056AW01	AW			Front Panel Ass'y
903	PCUSGA020AWZZ	AB			Cushion, Foot
904	TSPC-A562AWZZ	AC			Label, Specification
905	XEPY740P16000	AB			Screw, M4 X16mm
906	XEBY730P10000	AA			Screw, M3 X10mm
SP1,2	RSP-ZA173AWZZ	BA			Woofer
SP3,4	RSP-ZA174AWZZ	AR			Tweeter
907	XESY730P10000	AA			Screw, M3X10mm

[14] ACCESSORIES

PACKING METHOD (FOR U.S.A. ONLY)



NO.	PARTS CODE	PRICE RANK	NEW MARK	PART RANK	DESCRIPTION
[14] ACCESSORIES					
	QANTL0010AWZZ	AP			AM Loop Antenna
	RRMCGA081AWSA	AQ			Remote Control
	TINSEA121AWZZ	AG			Operation Manual [for SEC]
	TINSKA024AWZZ	AL			Operation Manual [for SECL]
	TINSZA181AWZZ	AD			Quick Guide [for SEC]
	92LFANT1535A	AF			FM Antenna
[15] P.W.B. ASSEMBLY (Not Replacement Item)					
PWB-A	92LPWB6475MANS	-			MainA1/PowerA2/SpeakerA3/RefreshA4
PWB-B	92LPWB6475DPLS	-			DisplayB1/USBB2/JackB3/LedB4/SubB5
PWB-C	92LPWB6475CDUS	-			CD MP3
PWB-D	92LPWB6274LEDS	-			Led (PWB Only)
PWB-E	QPWBF0027AWZZ	AD			CD Motor (PWB Only)
PWB-F	QPWBF1055AWZZ	AE			CD Changer Motor (PWB Only)
[16] OTHER SERVICE PARTS					
	UDSKA0004AFZZ	AZ			CD Optical Pickup Lens Cleaner Disc

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

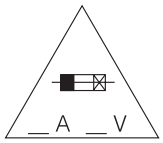
VCC ..... Ceramic type
VCK..... Ceramic type
VCT ..... Semiconductor type
VC••MF ..... Cylindrical type (without lead wire)
VC••MN..... Cylindrical type (without lead wire)
VC••TV..... Square type (without lead wire)
VC••TQ ..... Square type (without lead wire)
VC••CY ..... Square type (without lead wire)
VC••CZ ..... Square type (without lead wire)
VC•••••••••J .. The 13th character rep resents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS..... Carbon-film type
VRN ..... Metal-film type
VR••MF ..... Cylindrical type (without lead wire)
VR••MN..... Cylindrical type (without lead wire)
VR••TV..... Square type (without lead wire)
VR••TQ ..... Square type (without lead wire)
VR••CY ..... Square type (without lead wire)
VR••CZ ..... Square type (without lead wire)
VR•••••••••J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.



CAUTION:FOR CONTINUED
PROTECTION AGAINST FIRE
HAZARD, REPLACE ONLY WITH
SAME TYPE F801 , F802, ,F805 4A, 125V/
F803 ,F804 2A, 125V FUSES.

ATTENTION:POUR ASSURER
UNE LONGUE PROTECTION CONTRE
UN INCENDIE, REMPLACER SEULEMENT
PAR UN FUSIBLE DE
TYPE F801 , F802, ,F805 4A, 125V/
F803 ,F804 2A, 125V FUSES.

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SHARP CORPORATION
Sharp-Roxy Corporation
Sungai Petani, Kedah,
Malaysia

Printed in Malaysia
A0106-210MX•RR•M
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